CHILD LIFE IN . . . OUR SCHOOLS

MABEL A. BROWN.

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A MANUAL OF METHOD FOR TEACHERS OF INFANTS' SCHOOLS

BASED ON THE PRINCIPLES OF PESTALOZZI AND FROEBEL

BY

MABEL A. BROWN

With a Preface by

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WITH NUMEROUS ILLUSTRATIONS

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CONTENTS

LIST OF ILLUSTRATIONS

PREFACE

When Pestalozzi started what was practically the first Kindergarten, he initiated one of the greatest reforms of modern education. We owe to this great teacher a new attitude towards children, a new educational spirit, and a new ideal of the education of young children. In one sense, all these have now ceased to be new, because they have been accepted by all the most progressive teachers, and are affecting education at every stage. Pestalozzi's ideas were much further developed and systematized by Froebel, and it is in the Froebelian rendering that they are best known in England.

There are two serious dangers which beset the elaboration of any system, however necessary and desirable this may be. First, there is the danger of over-systematizing, i.e. a tendency to over-estimate details, and thus not to give the teacher sufficient freedom to utilize her own individuality. Secondly, an elaborate system has usually a very strong colouring of race, or time, or place ; and unless the teacher who uses the system can erase that local colouring, and insert another suitable to her own conditions, then part of the system must become conventional, unreal and non-living. Froebel has not completely escaped either danger. In some directions he has, I think, over-systematized, and some of his plans, quite suitable for little German children of the nineteenth century, are not altogether suitable for little British children of the twentieth century. But there remains a great mass of principles and much method that are most excellent and most stimulating, and that no progressive teacher can afford not to know, whatever may be her grade of teaching. The spirit of Pestalozzi and the principles of Froebel are as necessary in the university as in the nursery, and are equally necessary in all intermediate stages of education.

Miss Brown has attempted, and, I think, successfully accomplished a distinctly important work. There are probably many teachers who have neither time nor inclination to wade through the many books (and some of them are very dry, especially in translations !) in which the wisdom of Pestalozzi and Froebel are embedded. Miss Brown has, as it were, turned this wisdom " into current coin." She has changed the German coins into English

money, with which we can buy success in our English school life. She has taken the principles of the Kindergarten, and applying them under the ordinary conditions of a public primary school, she has clearly demonstrated that these principles can be largely carried out under these conditions. It is always desirable in England *to prove that a thing can be done by doing it.* This has been Miss Brown's plan, and this book tells the story. The Kindergarten was first introduced into England under the freer conditions and smaller classes of private and secondary schools. It is therefore of vital importance that it should be clearly shown that the Kindergarten spirit and method are equally suitable for public primary schools, and can be largely carried out under the ordinary conditions of to-day, as soon as we teachers know and understand both spirit and method.

Educational reform is of great importance at whatever stage it may occur, but it is more likely to produce immediate and permanent effects if it takes place in the very early stages of education. Consequently, any reform which is likely permanently to improve the youngest classes of our people's schools must be of enormous importance—educationally, morally, economically and even politically. Looked at from this standpoint, Miss Brown's successful attempt to state the fundamental truths of the Pestalozzian and Froebelian reform, in simple common-sense English, and to illustrate them by showing how she herself carries them out in her own school, is of considerable importance, and it deserves, and I hope will gain, considerable success.

Now ideals, scientific methods, an excellent system, valuable though these are, are yet of little practical use unless the teacher possesses also an innate love of children, an illuminating knowledge of the child-world and the forces which dominate it, and a real enthusiasm for humanity. To teachers so endowed I believe that this book will be of the greatest practical service, enabling them to understand better than ever the children that they love, and making it possible for them to help them in many ways that had not occurred to them before. And to those teachers whose pupils have passed beyond the infant stage, the principles stated and illustrated in this volume will be equally valuable, although naturally they will require a somewhat different application. One of the most valuable points about this book, to my mind, is the frank acknowledgment of its authoress that, while the principles are eternal—based on child-nature and science—the application of them which she pictures forth to us is not meant to be regulative or dogmatic, but simply suggestive. "It is the principles themselves that I want to emphasize, not my method of applying them in my own school. I only give the details of working to show that it can be done. Your application of them must be something very different from mine."

Miss Brown has emphasized the great desirability of the child's indi-

viduality, no less than the teacher's, having fair play. Her words are full of wisdom : " Every child's work will differ from every other child's work in one respect or another. This is the only kind of work which is of the highest value." " Their brushwork, drawing, etc., should not be duplicates." While she rightly emphasizes the importance of school hygiene, she rightly adds : " But it is undoubtedly, above all, the *moral* atmosphere in which the child lives which is of the utmost importance." I think that these two quotations show that the teacher who yearns for the newest theory, as well as the teacher who believes firmly in the old-fashioned English moral basis of education, will both find what they want in Miss Brown's book, and probably, in addition, some things that they will want as soon as they are presented to them. To the secondary teacher, this book is a series of valuable peeps into the life of a primary school, which may give valuable knowledge of an area of education with which she is not sufficiently familiar. To the earnest members of local authorities I recommend the reading of this book as by no means a waste of time. And to the earnest and loving parents of children in our infants' schools I venture to say : " Read this book ; it will help you to understand the school-world of your children. You will know better what the teachers are trying to do. You will be able to supplement their work far more effectively, and you will gain valuable hints how to manage your children wisely, from one who has had a wider experience of children than yourselves."

Foreigners have not valued highly our education of young children, and physiologists and psychologists have seriously criticized many of our plans and methods. But the future is full of hope, and this book is a delightful sign that the old-time isolation of the British teacher is vanishing. We are now learning gladly from Swiss Pestalozzi, German Froebel, and many other foreigners ; and we are beginning to enter into our inheritance, as educated people, of being citizens of the world, and therefore learning from all nations. If we can combine with this increased alertness of mind and greater teachableness our old-world virtues of love of justice and of freedom, self-government and sober common sense, our education will improve by leaps and bounds.

Practical teachers will be interested to know that Miss Brown's school is considered excellent by many who know nothing of Pestalozzi and Froebel. In her case " right theory " and " successful practice " are united as they should ever be ; and it is from both standpoints that I strongly recommend this book for the serious study of earnest teachers. Miss Brown rightly does not claim for her plans that teaching according to them will be easy. Teachers who wish to give as little time and energy as possible to their profession are advised not to read this book. But for those who care greatly about their profession, and take great pride in their work, who believe that teaching is

very important and very difficult if done rightly, who accept evolution in education as in everything else, and therefore believe that every teacher must be constantly improving or eventually degenerating, for such teachers, I feel sure, this book will be interesting, stimulating and helpful. And though our work be difficult and very arduous, yet if we possess enthusiasm such as forms a shining background behind every page which Miss Brown has written, then we shall be content " to live laborious days," if we can best help our children more effectively. And if we really have the spirit of Pestalozzi, we shall continue to learn as he did, humbly and fervently, right on till the light of earth pales before the sunshine of heaven. I recommend this book to all earnest and humble learners.

E. P. HUGHES.

CHAPTER I

INTRODUCTORY

TEACHERS, above all people, need to cultivate receptivity of mind, and yet how often it is that they are, above all people, prejudiced against anything new.

"Oh! these modern innovations! these fads and faddists!" they cry, when any one suggests a new way of doing an old thing. Why should it be so? Why should we be the only set of workers who cannot afford to profit by new thought, new methods? The manufacturer welcomes a new process, the artist a new medium of expression, the musician a new vogue in music. Yet we teachers, who should be, above all others, open to the reception of anything that will help us in securing the best methods of teaching for our children, often refuse to believe that our methods, which have served us so long, are even capable of improvement.

"Evolution" is the watchword and war-cry of the day, and we must accept it in the educational world, if our teaching is to be effective. The education of to-day is not the education of yesterday, and as it is the children of to-day with whom we have to deal, it behoves us to know and keep abreast of modern thought and tendencies in education. Then when anything arises which will benefit our work, we shall be ready to prove it with an open mind, and adopt it with alacrity and enthusiasm.

We are not so timorous and conservative in the twentieth century as we have been in the past. On every side scientific investigation rings the knell of tradition, and men are found willing to devote their whole lives to the trying and proving of some one point, if so be that they can benefit the generations of the future. We are all learning that what was the truth and the highest truth for one era is not necessarily the last pronouncement for the next.

Emerson is the great disciple of evolution of thought. He says:—"No truth so sublime, but it may be trivial to-morrow in the light of new thoughts."

So many of us cling to what we call consistency, as though it were one of the highest virtues. But there is a wise and a foolish consistency. Let us listen to Emerson again. "A foolish consistency," says he, "is the hobgoblin

of little minds, adored by little statesmen, philosophers and divines." And yet once more : " Speak what you think now in hard words, and to-morrow speak what to-morrow thinks in hard words again, though it contradict everything you said to-day."

Emerson expressly says—" a *foolish* consistency." And surely he would call us foolishly consistent, when we close our eyes to the trend of modern thought and experiment, preferring to tread in the footprints of our predecessors, forgetting that " the virtue of to-day may be the vice of to-morrow."

If we have the receptive mind, we shall be ready and willing to investigate and try new methods, and with regard to the practical application of Froebel's principles to the teaching of the children in our infants' schools, with which this little book has to deal, I feel sure that once teachers have investigated both principles and methods honestly, they will see that it is by far the most natural and therefore rational method yet evolved of teaching little children.

And it is a practical method, in spite of all its opponents say to the contrary. It is being proved daily by modern teachers that the work in an infants' school or class, while yet retaining all that is best in the old system, can be so impregnated by the spirit of Froebel, that the result of the blending is the best yet attained in the field of infant school method.

It would be worse than useless to endeavour to supplant the curriculum of an infants' school by that of a Kindergarten proper. It would be absurd on the face of it to imagine that we can teach classes of forty, fifty, or even more, in exactly the same way that we should teach a class of twelve. We know that we cannot, and until the day comes when we realize our ideal conditions of classes of twenty-five to thirty, we must adopt a compromise.

It is the *principles* of Froebel that we want. Once we have grasped those, we can formulate our own *methods* to suit our own district, class of children, etc. But the principles underlying the work must be the same in every case. This great truth must be realized : the function which education has to perform is the harmonious development of the whole of the child's faculties—physical, mental and moral. Any system which trains one set of faculties at the expense of the others is not a good one. Mind, body and soul must be developed side by side, and the Froebelian system provides for this all-round development.

And now, what are these principles to which our education should conform ?

Briefly speaking, they are as follows :—

1. Self-activity to produce development.

2. All-sided connectedness and unbroken continuity to further the intelligent acquisition of knowledge.

3. Creativeness to produce the assimilation of the knowledge thus gained and growth of power and skill.

4. Well-ordered physical activity for the all-round development of the body.

5. Happy, bright and harmonious surroundings for the helping and fostering all these.

It is well to be clear as to what we mean by each of these expressions, lest they become like the catchwords of a political party, high-sounding and empty. Let us investigate each one separately, and show how it can be applied in our teaching.

Self-activity and Development.—Education means development; development is produced by exercise of function, use of faculty; therefore self-activity for the production of development is the first principle. The amount of development possible in any one case depends partly on the original outfit, partly on the opportunities given for exercise, and the use made of those opportunities. But it is most important to remember this fact, viz., Only that exercise which is in harmony with the nature of the child, which is suitable to the stage of development which the child has reached, and proportioned to his strength, can produce true development. This principle should guide us in drawing out our schemes and time-tables, and in choosing our Kindergarten occupations. It will save us from any grave educational errors. The principle of self-activity will be shown in all our lessons, for the children will take their due share. They will not learn as formerly, by word of mouth, accepting our formal statements, but they will observe and note for themselves, ask questions and make suggestions, in fact become self-active and self-originating beings.

Continuity and Connectedness.—If the child is to be developed as a whole, we see that the whole of education must be continuous. There must be no gaps. Every stage must grow naturally out of the one that precedes it. This is the doctrine of continuity. By connectedness we mean the emphasizing of that interrelation that exists between all parts of education. Unrelated facts give little joy, little knowledge. The facts must be compared, classified and connected with other facts before they are assimilated so as to become organized knowledge. The mind proceeds from isolated facts to a completely unified philosophy by means of this process of assimilation.

This principle of continuity and connectedness is practically illustrated in the schemes of work contained in Chapter III and in the comments upon them.

Creativeness.—This is the child's own expression of an idea after he has assimilated it: thus rendering the inner outer. The idea enters his mind, becomes unified with the knowledge already there, and is given back again by means of an act of definite self-expression. These three doctrines of continuity, connectedness and creativeness form together the heart of the Froebelian system.

This principle of expressive doing reveals how much the child knows, exhibits and suggests new connections, and develops skill. It also trains the muscles, nerves and sense-organs to be willing, obedient and effective servants of the mind.

The practical application of this principle lies mainly in the expression or occupation lessons. It will be seen, on reading the chapters dealing with the various expression lessons, that blind copy is strongly discouraged. Children are encouraged in every way to express their own ideas, not only manually but verbally as well. Their clay modelling, or brushwork, or drawing, should not be duplicates. Each child's work should show his own ideas on the subject, and in this way every child's work will differ from every other child's in one respect or another. This is the only kind of work that is of the highest value, for it calls so many faculties into play. Intelligent observation, classification, reasoning powers must all be exercised, before there can be any real self-expression.

Well-ordered Physical Activity.—But this type of action, independent action, is best originated in an active healthy body, therefore we must look to the child's physical welfare. As with the brain, so with the body, exercise of faculty means development. This physical well-being is largely a matter of school hygiene, and embraces the question of site, building, ventilation, lighting, cleanliness and posture, as well as the actual physical exercise. The impulse of the normal child is movement. Because it is a natural impulse, we know that it is not only legitimate to provide for it, but essential to the child's well-being. Thus, especially with the little ones, we provide short lessons, frequent breaks for free play, and organized exercise. We take great care to provide fresh air, good light and cleanly premises, and to see that the postures of the child are such as shall help him to grow straight, strong and healthy. This will be emphasized more strongly in the chapter on games and drill.

Environment.—Lastly, happy and harmonious surroundings. School hygiene is a large factor here, but above all it is undoubtedly the *moral* atmosphere in which the child lives which is of the utmost importance. With regard to school life, it is what we call tone that has the greatest influence in

THE CENTRAL HALL.

making or marring the child's character. The child's hours in school should flow naturally, quietly and harmoniously, and this is only possible in a school where peace and orderliness, brightness and sympathy, love and unity prevail. Any harshness or capriciousness, loud voice or unevenness of temper vitiates the whole school atmosphere, and militates against that peace and orderliness which are so essential to the formation of a strong, true character. Especially must spasmodic activity alternating with laxity be avoided. It is the very worst thing possible for children of all ages. From day to day and month to month the education of the child should proceed logically, gradually and quietly, without any strain, so that his growth is as orderly, continuous and natural as the growth of a plant.

These are the broad principles which should underlie all our education, and it is the principles themselves that I want to emphasize, not my methods of applying them in my own school. I only give the details of working to show that it can be done. Your application of them must be something very different from mine, for an idea cannot pass through the brains of two people with any pretensions to education and emerge in the same form. After reading this little book, you will go your own way and "work out your own salvation," encouraged and helped by knowing that the principles *are* being worked upon, and what one has done another can do. Needless to say, the schemes given are not meant for one instant to be adopted wholesale. They are simply meant to be suggestive. Your schemes will be entirely different because of your different conditions of life. It is only in the point of practical application that the work of an infant school should differ from that of a Kindergarten. Take, for example, the question of discipline. With a class of ten or twelve children, it is quite permissible to let them make remarks and volunteer suggestions just as the spirit moves them. But this is not our case. To do this with a class of fifty! Why! the confusion of tongues at the building of the Tower of Babel would be nothing to it. Must then our children sit like little statues while the teacher pours out upon them the vials of her eloquence? No! that is where we apply our discrimination. You have only to try it to prove that quite small children will soon take in the fact that you cannot possibly hear and answer them if they all talk at once.

They will very soon learn to raise their hands if they have a suggestion or remark to offer, and to speak one at a time. Of course under specially exciting circumstances, such as the return from a walk, they *do* simply shower their remarks upon you as they dance round in their excitement, but they soon calm down and become quite rational. And this will make all the difference to the character of the work, once the children feel that they too have an active part to play. Nature lessons, which are often nothing more than

lectures, will become Nature talks, where the children will take their due share. And it follows as a matter of course, that their powers of observation, attention, and verbal and manual self-expression will be increased in exact proportion to the power of the teacher in stimulating their intelligent interest in all that goes on around them. It is the teacher who is the great factor. She will need much patience, perseverance and firmness, especially at the outset, but the reward will infinitely compensate the effort. The bright, happy faces of the children, their keen interest in all that goes on round them, their questions and remarks, and their growth in general intelligence, is an ample reward, and one that is like a draught of new wine to the teacher who really loves her work.

Let me ask you to give this system of teaching a fair trial. I am not writing from the fairy land of theory. It can be done, and is being done increasingly. Out of some dozen teachers I have had during the past few years, all but two of whom were trained in the old methods, I can confidently state that not one would wish for an instant to go back to the former state of things, even though the new system involves much more thought, time, tact and patience. I do not pretend for one moment that the work is easy. What of that ? If the system is the best for the children, that is all with which we are concerned. The schools are for the children, and not for the teachers, and it is our place to see that the principles which guide our education are those which shall prove of the highest use to the children, not those which shall mean the path of least resistance for the teacher.

But the work gains so in general interest that one never considers the trouble of preparation. It brings its own reward in full and perfect satisfaction, that, knowing what is best, we are steadily and conscientiously trying to reach it.

There are many schools where methods such as these have been worked upon for years, and successfully, and to many, very many, I hope there will be little entirely new in the following pages. But at the same time, it is not so everywhere, and if only some eager and enthusiastic fellow-workers find a little help and encouragement from the record of my own experience, I shall be more than repaid for the labour of writing, which has indeed been a labour of love. To such people I submit the following chapters in full hope and humility.

CHAPTER II

OUR SCHOOL:—TIME-TABLE AND SYLLABUSES OF WORK

LET me describe our school as it looks on this sunny spring morning. It stands in the middle of a field, on the high road to one of our principal towns, and towards the south-east and south the land stretches away to the sea, at a distance of some three-quarters of a mile as the crow flies.

It is a spacious building, lofty and very light. Classrooms, built to accommodate fifty, open from three sides of the hall, while the fourth side has six large windows. The hall is well supplied with pictures, most of them engravings from masterpieces. Several animal studies after Landseer occupy places on the walls, with an excellent set of chromo-lithograph pictures of the seasons, and a set of friezes showing the growth of the corn. On the window-ledges are animal models, plants and vases of flowers—daffodils and narcissi arranged with sprays of ivy.

A fixed swing, which will hold four children, occupies a recess. At the far end of the room is the piano; near it a small table with an aquarium. All round the walls, at a convenient height, are reversible blackboards for the children's Nature work. On the floor two large concentric rings are painted in red paint, with diameters of 12 and 16 feet respectively. These are for the games. At equal distances all over the floor alternate black and red crosses are painted. These show the children's places for singing and drill. A museum at one side shows various specimens of the children's work.

But of greater interest to the teacher are the classrooms. These have a boarded wainscotting to a height of 4 feet, and this space is usually gay with teachers' and children's illustrations for stories and Nature lessons. Mounted on brown paper or cardboard are numerous specimens from Kindergarten expression lessons. Look into the baby room for a moment, and see the evidences of spring-time. Just at this moment the little ones are playing with Gift I balls. They are singing a song of spring flowers, and their variously coloured balls become violets, primroses, bluebells, scarlet tulips and young spring leaves for the nonce. Do you see that picture of the spring fairy on the wall? Where she has stepped, the daisies show her footprints, and from her tiny apron she scatters flowers with lavish generosity. No doubt these

little people have a very intimate acquaintance with pretty Miss Spring. A card at the side shows tulips, crocuses, daffodils and primroses coloured with crayons by the children. True, they do not show a just appreciation of the value of boundary lines, but they show goodwill on the part of these tiny mites. Another card exhibits free drawings on the same lines, while various sheets of brown paper show snowdrops drawn in green and white chalk in a very creditable manner. Here, too, the window-ledges are gay with flowers. The doors have pretty hangings of Japanese bead and reed curtains, threaded by the children. Altogether this room presents a very bright aspect. Above the wainscotting all kinds of framed pictures appear, all of them dealing with children and animals. To the child, with whom life is just beginning, nothing appeals like the presentation of life in pictorial form. His own kind—children at play or at work—and, after that, pictures dealing with animal-life, appeal most forcibly. So, guided by this knowledge, we make our choice. Some are roller pictures, others culled from Christmas supplements of magazines and framed, but all are coloured, following again the preference of the child. But of greater value than all these are the teacher's own illustrations made for story, game, or Nature lesson, which fill all available spaces, and which are greatly appreciated by the babies, who expect and ask for them and are not disappointed. But of this subject more anon.

At this side you notice a large swing which will hold four little ones, and at the side of the swing is a cage with our pet canary. The first ten minutes or so of every morning are spent in attending to his wants, and one meets small people going through the corridor with a most important air, "to get some water for Dicky," or fetch fresh sand or clean his tray. These are privileges highly valued. Then, when all preparations are made, with what delight they watch while Dick balances his little body on the side of his bath, gazing into the water with a meditative air, while he ponders the question of lowered temperature. Then the cries of approval when he jumps in, scattering the water in glittering drops all over his little yellow body.

In ways such as these we endeavour to teach our children kindness to animals and reverence for animal life.

In another classroom the children have a dove for a pet. It was found by one of the teachers in a hedge, entangled among the briers. It had lost all its tail feathers in its endeavours to free itself. We made it a house out of an old sugar box, with a flag-stick for a perch, and a wire netting front. It seems very contented, and is quite tame, coming out every day for exercise. We are much interested at present in watching the growth of a new tail. The children quite look upon it as one of themselves. Only yesterday they told me: "When we finish our recitation, *he* says some"; and they frequently call the attention of their teacher to the fact that the dove is listening most

attentively to the Nature lesson. I wish we had a special pet for every class, but at present we only have them for the younger children.

All the classrooms are built alike, and by a glance round the walls you can make a fair estimate of what stage in their development the children have reached. In the rooms allotted to Class I and Standard I greater precedence is given to the children's work, for by the time they reach the age of six, seven, or eight their powers of self-expression by means of brush-drawing, paper cutting, etc., have developed, so that their work is becoming artistic. They know something of the value of detail and arrangement. In Standard I room you may see geometrical illustrations in drawing and crayoning, and also in paper folding, together with their own plans and maps of the school and the immediate neighbourhood, besides an abundance of Nature work. Here, too, are evidences that life is becoming more serious—pens and ink, pictures illustrating various industries, and depicting historical incidents, have their due place.

So much, then, to give you an idea of the school, where the following plans have been evolved, tested and worked upon for the past six and a half years. And there are many such buildings nowadays, when England is at last beginning to see the importance of good educational conditions for her children, who are to be the men and women of the next generation; when education is being defined, not as so much reading, writing and arithmetic to be crammed *nolens volens* into the child's brain, but as the harmonious development of the whole of the child's faculties—physical, mental and moral.

Of course, I know that there are many, very many, that do not possess the advantages of modern buildings and apparatus; but even there it is the teacher that makes the school, not the school the teacher. In many places the buildings are poor, the floor space limited, and the apparatus insufficient. But I *do* think most strongly that many of us do not realize the immense fund within ourselves that we can draw upon. Most emphatically I state that *no* school, however badly equipped, need be without illustrations for every week's work. Brown paper and chalk, cardboard and crayons or paints are surely available everywhere, and though at first one is often tempted to despair of ever producing anything that might even by courtesy be called a picture, yet the old proverb holds good: "You do not know what you can do till you try." I have had teachers who have been in the beginning simply aghast at the idea of being expected to make a picture; yet, without exception, every one has learned to do it, and to take pleasure in doing it.

Until you have tried it, you do not know the value your rough sketches have in the eyes of the children. Let your attempts be ever so crude, they at least will be an appreciative public. In our work we are constantly met with the request, "Draw it," when we come to the most thrilling part of

a story. The more dramatic the situation, the more the children seem to find the value enhanced by pictorial representation. Blackboard illustration is especially valuable, for while one is talking, the hand can be sketching, and the children's interest doubly ensured. And do let me impress upon you that no one need despair. Get a good text book, or set of drawing cards with simple outlines, and make a hopeful start. It is a most fascinating subject, and one rapidly improves in manipulatory power.

The improvement in the appearance of the classroom is very great. Bare walls soon become decorated, and not only so, but these decorations of themselves show most plainly that here at any rate a real interest is taken in the work. A stranger coming in sees at a glance the course of study that is being pursued, and the illustrations being thus present to the eyes of the children help to keep the subjects for ever "green in their remembrances."

The gain to the teacher is not less. To draw or paint an object, one has to study it closely. No mere cursory glance will do. It must be faithfully observed before it can be accurately reproduced. Consequently, one's knowledge must be greater after painting an object than it was before so doing. Details that do not strike one upon a perfunctory examination come forcibly into notice when a careful study is made, and one's own knowledge becomes much fuller and richer.

Thus the making of pictures is of great value for all concerned. Such illustrations mean decoration and beauty to the school, interest and attention to the children, knowledge and power to the teacher.

"A lot of work," you will perhaps say. Yes; but a labour of love if you are a child-lover, as every teacher of little children should be. You will reap your full reward in those bright glad eyes and in the childish applause and appreciation that falls from the baby lips, and gleams and glows in the innocent faces.

Too many children attending our public elementary schools, as they are to-day, come from homes where the sordid and seamy side of life is only too apparent. For them the happy child-life, that is natural to the children of better class people, is non-existent. For them there are no bright nurseries, with their gay pictures and picture books; no fairy tales told round the cosy fire; no one to arouse and stimulate their innocent imagination. Their nursery and education are of the street. Is it nothing to you that you may be the one to awaken the imagination that often lies dormant in the child so brought up? You may open to him the doors of that Land of Enchantment which is the birthright, the inheritance of every child, by virtue of his childhood. Circumstances have conspired to deprive him of it, but to you is given, if you will have it, the privilege of taking him by the hand and wandering with him in those Elysian fields. Remember, you cannot *point*

the way ; you must go too. You will mutually teach each other many things. "Except ye become as a little child, ye cannot enter the Kingdom of Heaven," says the Book of books, and it is so with this kingdom too. It is those individuals who, from their constant contact and sympathy with little children, have the secret of perennial youth in their hearts, who have the magic wand which makes all things new, and re-creates the world. The name of the wand is "sympathy," the key to all hearts.

And whether the subject be a story or Nature lesson, or game or drawing, or anything else you like, though you possess all the other virtues and have not sympathy, you will fall short of the highest. There *is* a royal road to the child's heart, and there is only one, and you must travel by it if you would become one with him and share his joys, his sorrows and his secrets. When the child confides his secrets to you, depend upon it you have reached the topmost pinnacle of his regard. It is not the clever student, the writer of brilliant papers, who succeeds best with these little ones ; but the girl, the woman who really loves them and longs to brighten their lives, who strives to understand them and to participate in all their experiences. And this sympathy will teach her, as nothing else can, the right way to teach them, the right way to train them, the way to appeal to the best that is in them. Judging by tangible results, her success may not seem to be great ; improvement seems slow, but the seed now sown *will* bring forth its fruit in due time. We cannot hasten it. Rapid growth does not produce the best fruition. "First the blade, then the ear, after that the full corn in the ear." And though we see little reward of our labours, we work on in faith, patience and hope, knowing that no true work, done from a deep conviction, was ever wasted. We may not, most likely will not, reap, but the harvest will come, and then what matter who the reaper may be ?

Time-table for Children under Five. Set I. 1903-5

	9–9.30	9.30–10	10–10.30	10.30 to 10.45	10.45 to 11.10	11.10 to 11.30	11.30 to 11.40	11.40–12	2–2.30	2.30–2.40	2.40–3	3 to 3.10	3.10–3.40	3.40–3.55
M.	Hymns	Story	Games	Play	Sounds	Clay Mod.	Singing and Finger Plays	Number Play	Drawing	Singing	Gift III or IV	Play	Expression Lesson	Picture Talk or Story
	,,	Games	Story		Gift III	,,		,,	,,	,,	Gift I or II		,,	,,
T.	,,	Nature Lesson	Games		Sounds	Recitation		Nine-pins	Writing	,,	Picture Talk		,,	Finger Plays
	,,	Games	Nature Lesson		Sticks	,,		,,	Drawing	,,	,,		,,	,,
W.	,,	Nature Lesson	Games		Sounds	Clay Mod.		Number Play	Drawing	,,	Gift III or IV		,,	Picture Talk or Story
	,,	Games	Nature Lesson		Gift III	,,		,,	,,	,,	Gift I or II		,,	,,
Th.	,,	Nature Lesson	Games		Sounds	Recitation		Nine-pins	Writing	,,	Picture Talk		,,	Finger Plays
	,,	Games	Nature Lesson		Sticks	,,		,,	Drawing	,,	,,		,,	,,
F.	,,	Nature Lesson	Games		Sounds	Clay Mod.		Number Play	Drawing	,,	Gift III or IV		Fairy Tale or Miscellaneous Free Play	
	,,	Games	Nature Lesson		Gift III	,,		,,	,,	,,	Gift I or II			

TEACHER'S ILLUSTRATIONS FOR SCHEMES (see p. 63).

Time Table for Children over Five. Set I. 1903-5

		9–9.30	9.30–10	10–10.30	10.30 to 10.45	10.45 to 11.15	11.15 to 11.30	11.30–12	2–2.30	2.30 to 2.45	2.45–3	3 to 3.10	3.10–3.40	3.40–4
M.	St. I.	Hymns	Story	Reading	Play	Number	Drill	B.B. Drawing	*Boys*—Drawing		Word Building	Play	Expression Lesson	Singing
	Cl. I.	,,	,,	,,		,,	,,	Writing	*Girls*—Needlework		,,		,,	,,
	Cl. II.	Bible Story	,,	,,		Games	Number	,,	B.B. Drawing, Singing		and Drill		,,	Picture Talk
T.	St. I.	Bible Story	Nature Lesson	Number		Reading	Drill	Writing	Reading		Recitation or Tonic		,,	Singing
	Cl. I.	,,	,,	,,		,,	,,	B.B. Drawing	,,		,,		,,	,,
	Cl. II.	Hymns	,,	,,		Games	Reading	Writing	Drawing		,,		,,	Conversational L.
W.	St. I.	Hymns	Geography	Reading		Number	Drill	Writing	*Boys*—Drawing		Word Building		,,	Singing
	Cl. I.	,,	Nature Lesson	,,		Games	,,	,,	*Girls*—Needlework		,,		,,	,,
	Cl. II.	Bible Story	,,	,,		Number		B.B. Drawing	Drawing		Singing		,,	Picture Talk
Th.	St. I.	Bible Story	Nature Lesson	Number		Reading	Drill	B.B. Drawing	Reading		Recitation or Tonic		,,	Singing
	Cl. I.	,,	,,	,,		,,	,,	Writing	,,		,,			
	Cl. II.	Hymns	,,	,,		Games	Reading	,,	Drawing		,,		,,	Conversational L.
F.	St. I.	Repetition	History	Reading		Number	Drill	Writing	*Boys*—Drawing		Word Building		Fairy Optional Expression Lesson	Tale or Ex-
	Cl. I.	,,	Nature Lesson	,,		,,	,,	B.B. Drawing	*Girls*—Needlework		,,		,,	,,
	Cl. II.	,,	,,	,,		Games	Number	Writing	B.B. Drawing		Singing		,,	,,

Time Table for Standard I

		9–9.30	9.30–10	10–10.30	10.30 to 10.45	10.45–11.10
Monday.	St. I. Cl. I.	Hymns (hall) ,,	Reading ,,	Number ,,	Play	Story ,,
Tuesday.	St. I.	Scripture Story	Number	Reading		Nature Lesson
	Cl. I.	,, ,,	,,	B.B. Drawing (hall)		,, ,,
Wednesday	St. I. Cl. I.	Repetition (hall) ,, ,,	Reading ,,	Number ,,		History or Geography Nature Lesson
Thursday	St. I.	Scripture Story	Number	Reading		Nature Lesson.
	Cl. I.	,, ,,	,,	B.B. Drawing (hall)		,, ,,
Friday.	St. I. Cl.I.	Hymns (hall) ,, ,,	Reading ,,	Number ,,		Nature or Object Lesson

Time Table for

	9–9.30	9.30–9.50	9.50 to 10.10	10.10–10.30	10.30 to 10.45	10.45–11.10	11.10–11.40
Cl. II. Cl. III.	Nature Talk and Scripture Story	Reading Sounds	Singing, Finger Plays and Simple Drill	Number Games	Play	Story ,,	Illustrating Story
Cl. II. Cl. III.	Hymns (hall) ,,	Reading Sounds		Number ,,		Nature Lesson ,, ,,	Illustrating Nature Lesson
Cl. II. Cl. III	Nature Talk and Repetition	Reading Sounds		Number Games		,, ,, ,, ,,	,, ,, ,, ,,
Cl. II. Cl. III.	Hymns (hall) ,,	Reading Sounds		Number ,,		,, ,, ,, ,,	,, ,, ,, ,,
Cl. II. Cl. III.	Nature Talk and Scripture Story.	Reading Sounds		,, Games		Nature or Object Lesson	,, ,, ,, ,,

and Class I. Set II. 1905-6

11.10–11.40	11.40–12	2–2.30	2.30–3	3 to 3.10	3.10–3.40	3.40–3.55
Illustrating Story	Drill Games (hall)	Reading ,,	Singing (hall) ,,	Play	Writing ,,	Recitation Tonic Sol-Fa
Illustrating Nature Lesson	Games or Drill (hall) Drill	*Girls*—Needlework *Boys*—Drawing	Mental till 2.45 ,,		B.B. Drawing Writing	Tonic Sol-Fa Recitation
B.B. Drawing Illustrating Nature Lesson	Drill Maypole or Games (hall)	Number ,,	Singing (hall) ,,		,, ,,	Recitation Tonic Sol-Fa
Cane Weaving Illustrating Nature Lesson	Games or Drill (hall) Drill	*Girls*—Knitting *Boys*—Geometry	Mental till 2.45 ,,		,, ,,	Tonic Sol-Fa Recitation
,, ,,	Drill Games (hall)	Reading ,,	Singing (hall) ,,		Optional ,,	Lessons ,,

Classes II and III

11.40–12	2.5–2.30	2.30–3	3 to 3.10	3.10–3.40	3.40–3.55
Recitation Number	B.B. Drawing (hall) Writing	K.G. Occupation ,, ,,	Play	Games Free time	Conversational Lesson
Picture Talk ,, ,,	Writing B.B. Drawing	Singing (hall) ,, ,,		Free time Recitation	Story Games
Recitation Number	B.B. Drawing (hall) Writing	K.G. Occupation ,, ,,		Games Free time	Conversational Lesson
Picture Talk ,, ,,	Writing B.B. Drawing	Singing (hall) ,, ,,		Free time Recitation	Story Games
Recitation Number	Writing B.B. Drawing (hall)	K.G. Occupation ,, ,,		Optional ,,	Subjects ,,

Babies' Time Table—Morning

	9–9.30	9.30–10	10–10.20	10.20–10.50	10.50–11.10	11.10–11.35	11.35–11.55
Monday	Registers, Feeding Canary, Hymns	Games and Marching	Building	Lunch and Play	Story	Illustrating Story	Free Occupation Time
Tuesday	,,	,,	Making Number Pictures	,,	Nature or Object Lesson	Illustrating Lesson	Recitation and Play with Toys
Wednesday	,,	,,	Building	,,	,,	Illustrating Lesson	Free Occupation Time
Thursday	,,	,,	Making Number Pictures.	,,	,,	Illustrating Lesson	Recitation and Play with Toys
Friday	,,	,,	Building	,,	,,	Illustrating Lesson	Telling Stories

Afternoon

	2–2.25	2.25–2.35	2.35–2.55	2.55–3.15	3.15–3.40	3.40–3.55
Monday	Registers and Sand Drawing	Singing and Recitation	Talk about Pictures	Play	Bead-threading for Colour and Number	(In Hall)—Games or Play with Toys
Tuesday	Registers and Chalk Drawing	Nursery Rhymes	Colour Lesson	,,	Clay-modelling	Free Time
Wednesday	Registers and Sand Drawing	Finger Plays—Imitation Games	Object Talk	,,	Stick-laying	(In Hall)—Games or Play with Toys
Thursday	Registers and Chalk Drawing	Nursery Rhymes	Colour Lesson	,,	Clay-modelling	Free Time
Friday	Registers and Crayon Drawing	Finger Plays—Imitation Games	Talk about Pictures	,,	Bead-threading	(In Hall)—Games or Play with Toys

Brief Notes on the Time Tables. Set I

It will be noticed that separate time tables are used for the children over five and those under five years of age. This is in order to allow for shorter lessons, and more intervals for finger plays and movement games, in the case of the younger ones.

The chief points to notice are :—

1. That every class except Standard I gets a Nature lesson every day but Monday, and that this lesson is the first secular subject of the day, thus giving the keynote of the work to be taken.

2. All the children of five years and under are allowed half an hour for games every day. These games are played either in the playground or in the hall, preferably the former.

3. Reading and arithmetic are always taken when the children are freshest, and in no case do two lessons which demand close attention and strain follow one another. The difficult subjects are sandwiched between recreative ones.

4. *No* needlework is taken with girls under six.

5. Every class in the school gets a free hour once a week—on Friday, from 3 to 4—when the teacher is at liberty to take any subject she chooses : fairy tales, guessing games, a walk, or free play, etc.

6. Picture talks and conversational lessons are taken frequently with the younger children. This is for language teaching, to help the little ones to adequate verbal self-expression.

7. Drawing plays a very important part right through the school.

Brief Notes on the Time Tables. Set II, p. 26

This is the time table I have arranged for 1905–6. It works excellently, and the teachers find it much more interesting and easy than the previous one.

In this the chief points to notice are :—

1. A free half-hour is allowed twice a week in Classes II and III, and very frequently with the babies (see chapter on " Discipline," p. 127).

2. The difficult work of the day, as far as mental strain is regarded, is over by 10.30. Reading and number both come then as a general rule, except in Class I and Standard I, where a reading or number lesson comes first in the afternoon, three days a week. No new work is ever taken in the afternoons.

3. No two standing lessons follow each other. In the cases where blackboard drawing precedes drill or singing, the drawing lesson is taken in the classroom when the children can sit at their work.

4. The hall is being used by one class or another all day long, except during the Nature lesson, when there is absolute quiet.

5. The half-hour following the story or Nature lesson is always used to illustrate that lesson by means of a Kindergarten occupation.

6. Writing is taken in the afternoon, as it involves no mental strain.

7. As far as possible, " learning " and " doing " lessons alternate with one another.

8. The time table for the " Babies " is not necessarily closely followed. Any decided lead taken by the children is followed up by the teacher.

Syllabus of Work

STANDARD I

READING	*Dale Reader*, No. 1. Various Standard I and Story Readers. Stead's *Books for the Bairns.* Nature Reading Lessons.
WRITING	Transcription. Copy Writing.
UPPER DIVISION	Dictation of Simple Words and Sentences. Composition and Writing of a Simple Sentence.
ARITHMETIC	According to Scheme B. Tables to 6 times 12. Money sums to 2*s.* 6*d.* Parts of £1.
KINDERGARTEN OCCUPATIONS.	Brushwork. Cane Weaving. Clay Modelling. Drawing and Paper Cutting. Blackboard Drawing. Sand Modelling in connection with Geography.
SINGING	Songs. Tonic Sol-Fa from Modulator and Manual Signs. Time, Tune, and Ear Tests.
DRILL	Swedish. Fan Drill for Girls.
FOR GEOGRAPHY see Schemes.	
NEEDLEWORK FOR GIRLS	Hemming, Joining, Seaming, Knitting.
DRAWING FOR BOYS	Designing on 1″ and ½″ Chequers. Freehand Work. Geometry.

CLASS I

READING	*Dale Primer II.* *Dale Infant Reader.* Nature Reading Lessons.
WRITING	Names from Memory. Capital and Small Letters from Memory. Copy Writing of Easy Sentences.
ARITHMETIC	Mental Work in the Four Simple Rules up to 30. Tables to 4 times 12. Easy Money Sums.

Kindergarten Occupations	Brushwork. Clay Modelling. Drawing and Paper Cutting. Blackboard Drawing. Geometrical Paper Folding. Geometrical Tablet Laying.
Singing . . .	Songs and Games. Tonic Sol-Fa from Modulator and Manual Signs—Simple Passages.
Drill	As in Standard I.
Needlework for Girls	Hemming and Knitting.
Drawing for Boys .	Designing on 1″ Chequers. Freehand Work. Geometry.

CLASS II

Reading	Word-building on Blackboard. Reading from Blackboard. Printing and Illustrating Words *Dale Steps to Reading.* *Dale Primer I.*
Writing . . .	Copy Writing of all Small Letters and Simple Words.
Arithmetic . .	Number to 10. Recognition of Figures to 10.
Kindergarten Occupation	Brushwork. Clay Modelling. Blackboard Drawing. Object Paper Folding. Building with Gift III and IV combined. Chalk Drawing on Brown Paper. Free-paper Cutting.
Singing . . .	Songs and Games. Very Simple Tonic Sol-Fa Practice.
Drill	Very Simple Swedish Movements. Games.

PAINTING FROM NATURE.

CLASS III

READING . . .	Sounds with Tabulating Frame and Blackboard. Simple Words from Blackboard in connection with a Story. Printing and Illustrating Words.
WRITING . . .	The following Small Letters from Copy : i, u, w, n, m.
ARITHMETIC . .	Number to 6. Recognition of Figures to 6.
KINDERGARTEN OCCUPATIONS	Colouring. Clay Modelling. Drawing with Chalk on Brown Paper. Drawing with Chalk on Blackboards. Drawing with Crayon on White Paper. Building with Gift IV. Stick-laying. Simple Paper Folding. Bead and Reed Work. Wool Ball Making.
SINGING . . .	Songs and Games.
DRILL . . .	Physical Exercise taken in Games.

BABIES

No reading or writing.
Number taught by means of number pictures and plays.

KINDERGARTEN OCCUPATIONS	Colouring. Clay Modelling. Chalk Drawing. Crayon Drawing. Sand Drawing. Bead Threading. Bead and Reed Work. Stick-laying. Building with Gift III. Gift II. Gift I.
SINGING . . .	Songs and Games. Finger Plays. Nursery Rhymes.

Picture Talks, Conversational Lessons, Nature Talks and Free Play fill up the rest of the time. (See "Time Table.")

CHAPTER III

NATURE STUDY AND SCHEMES OF WORK

Nature Study is made the basic subject of our curriculum, and this for various reasons.

1. It is the subject that is most interesting to the child at this stage of his development, and therefore the one that it is best for him to study. Children are always intensely interested in animal and plant life and in natural phenomena. This being the case, we can be of best service to the child by following his lead, and providing him with the best conditions for Nature study.

2. There is One Cause of everything, and Nature is the work of His fingers ; therefore there must be an underlying unity in all things, one great law to which all life conforms. Thus the study of Nature helps the child to adjust more clearly his relation to God, to mankind and to Nature herself. It helps him in the realization of a pure and holy life.

3. During the first years of a child's life it is essential that his feeling and willing powers should receive due training, and there is no subject better calculated to promote right feeling in a child than Nature study. From actual contact with animals, birds, bees and flowers, he learns that reverence for life which is so often wanting in primal child nature. He learns sympathy with the lowliest forms of animal life, so that he shrinks from inflicting pain in any form, and his natural appreciation of beauty of colour and form is trained and strengthened.

For these reasons Nature study is the foundation subject of all our schemes of work.

Schemes of Work.—Every one admits that one must have a scheme of work ; but when it comes to discussing the rigidity or elasticity of the scheme, people begin to differ. In some schools the scheme is drawn up and rigidly adhered to, no matter what the weather, circumstances and opportunities. Some head teachers go so far as to make the scheme for the whole school week by week, stating for each teacher what she shall take in every subject, allowing no room whatever for the individual teacher to use her own

brains for the benefit of her own class. This may be—I only say *may* be—a good plan with young teachers and those just beginning to work on this system; but I doubt the advisability of even that. Personally I prefer to give every teacher what I call a suggestive scheme of work, from which she can select, and upon which she can elaborate. Such schemes are those which follow. Before the scheme is started, we all meet together, often over a cup of tea, and talk over plans for the next three months, every one being at liberty to make suggestions. In this way we get the benefit of the brains of the entire staff. Ideas strike one which do not strike another, and often a difficult point is solved by means of conference. Then from this season scheme each teacher works out her own weekly schemes according to the requirements of her class. The subjects for the coming week are sent up to me on the previous Friday, and I spend part of that morning in thinking over the subjects, and seeing whether I have any information, pictures, poems, etc., that bear upon them. In this way, as I say, we help one another, and the children are great gainers thereby.

Besides the schemes for a whole year, which we used last year, I give the scheme which I drew up for this spring, and some pages taken from the teachers' notebooks, showing how they draw up and illustrate their schemes week by week. Some of them put their notes of lessons in the same book, some in a separate book, just as they choose. There is one very great advantage in drawing up schemes of this kind. It is very obvious that there can be no hesitation, no uncertainty, no looseness in the character of the work. The teacher has a clear and definite idea of the subject in her mind, and also the way in which she intends to treat that subject, the sidelights she means to bring to bear upon it. This gives her more confidence in herself, and surely works more definite results with the children. Their minds are not drawn and distracted hither and thither by a multitude of subjects being brought under their notice, each for a short time, as in the old days. One subject is taken and presented in as many ways as possible, looked at from every point of view, and thus by degrees the child's knowledge becomes clear and full.

I remember a lady saying to me some time ago, when she was visiting the school, and I was showing, as far as possible, how we correlated our subjects, "Oh! yes, I know. You give a lesson on a bee, you sing about a bee, you recite about a bee, you draw a bee and paint a bee, and" (with much emphasis) "at the end of a week both teacher and children are sick of a bee." I could not help being amused at her idea of correlation, and I pointed out that were I drawing out a week's work, with the poor bee for a central figure, I should take his surroundings very much more into calculation, and produce a scheme something like the following:

Nature Lessons . .	The Bee, The Beehive, Honey and the Comb.
Song and Game . .	Summer-time.
Recitation . . .	Here is the Beehive.
Drawing . . .	A Jar of Honey, Hexagonal Cells.
Painting . . .	A Bee—Straw Skep for Hive.
Clay Modelling. .	A Beehive.

Here there is plenty of variety, but everything bears upon the central subject. After working on such a scheme, teachers and children would be more interested in the bee than they were before, and certainly the children's minds would be infinitely richer.

Each subject in its turn is thus made the nucleus of many others which are grouped round it, and by this means the children learn to see the relation in which natural objects stand to each other.

The Essentials of a Good Scheme.—There are a few broad rules by which we can test the value and suitability of our scheme of work.

First.—It should provide work, and material with which to work, on a line with the child's present state of development.

I saw a scheme some time ago for children of five and another for children of seven. Each provided identically the same occupations for both classes. Now it can easily be seen that this was a grave mistake. In passing through the classes of a school, the child should find both the actual work to be done and the materials to be used graduated according to his needs and development. In this case drawing and paper cutting were put down for both classes, and also stick-laying. Now paper cutting itself is not very difficult, but in this case the object to be cut out was one which presented serious problems of handling, and moreover was not easy to draw, so that altogether it was beyond children of five years of age. It would be, on the other hand, an extremely valuable exercise to a seven-year-old. At the age of seven the child should not be manipulating precisely the same material which he exercised his powers upon when he was five. To give a boy of seven a simple stick-laying lesson is to insult his mental and manipulatory powers, while the same exercise taken by a five-year-old will tax all his energies to accomplish well. *Vice versâ*, a design in brushwork originated by the child himself will be a source of pleasure and profit to the older boy, while to the little one it will be simply an impossibility. So that it is of fundamental importance to graduate both work and material, so that it shall be thoroughly suitable to the child's state of development.

Second.—Not only so, but *the scheme must be in harmony with the child's surroundings.* In these days we hear much, and truly, of the all-importance of environment. If it be true that this environment plays such an important

part in the work of education, it is surely only right that we should make the best use of this great factor. As it must in any case enter largely into the moulding of the child's life and character, let us press this agency into our service and use it wisely and well in framing our schemes.

Does the child live in a seaport town? What can possibly be more suitable than a scheme which will give him the details of a sea-faring life, with its delights and dangers; the construction and uses of the docks; the meaning of import and export. This last will bring in most delightful lessons on foreign lands, in which children are always so interested. They will be delighted to accompany you on an imaginary visit to any part of the world, if only you will make it real to them.

The sea-shore with its rocks and pebbles, shells and sands, anemones and starfish; its tidal ebb and flow will form an interesting section, while many lessons can be taken on the wonders of the sea itself—the sea-floor with its strange growths, coral and sponge and pearls, the diver and his perilous work. Classes of fish and methods of fishing provide an exhaustive series too.

For the child who lives in the country it is easy to cater. Nature has surrounded him with her beauties—scattered her treasures lavishly in field and wood and hedgerow. Here, if anywhere, is ample material for Nature study and ample opportunity. Flowers, birds, bees, the child meets them on every hand, and it is both a pleasure and a privilege to teach him to watch, observe and love them all, to compare and contrast their habits and structure, to acquire real lasting knowledge at first hand from Nature herself.

Then for the child who lives in the heart of the busy city. He, too, must learn from his surroundings, from objects and phenomena that form part of his every-day life. Lessons on trades and manufactures will find a place in his scheme. The newspaper boy with his bag will form a centre round which we can weave a week's work which deals with the manufacture of paper, printing, books and papers of olden times. The shoe-black and his outfit, the crossing-sweeper with his broom, and the harmless necessary sweep can all be pressed into the service.

The traffic of the city forms another nucleus round which cluster the subject of the horse and cart, the cab, the car, the lamplighter and the all-important policeman. Travelling in the olden days and travelling in foreign lands will come in here. Altogether this will form the groundwork for a scheme which will last fully three months. Pictures and anecdotes culled in odd times from pictorial papers and magazines, from old reading books and Christmas supplements, will prove very valuable aids to making the teaching realistic.

Then with regard to the *Nature teaching*. If the children cannot be

taken to the leafy ways of Nature, surely we must bring Nature to them. So much is being said on the subject of Nature study, that it is producing in some cases a forced, artificial growth which is worse than useless. We do not want that. And town schools situated in congested areas have circumstances very much against them. But they need not be without materials for Nature study. Surely most of the teachers have friends in the country, who would be more than willing to contribute a box of wild flowers, or common garden blossoms, or autumn leaves, once a month. There is a society in London which provides for this intercommunication between town schools and friends in the country, and it is a most admirable plan. But personally I do not see why any individual town school could not arrange such matters to its satisfaction with a little effort, without the help of a society. If four people would promise to send a box once a month, each having their stated dates, schemes could be arranged accordingly. Monday is the best day to post the boxes, as then the children get the longest benefit of them, and each contributor should write before the close of the preceding week, stating what he or she intends sending. It is better to send a large quantity of one specimen than to send a little of many, because in the former case each child can have a flower of its own to observe and copy from. You may say, "How can we draw up schemes three months in advance, if we work on this plan?" Well, of course your schemes cannot be rigid as to dates. Snow is not always sufficiently obliging as to come during the week you plan to give it your attention, and though the appearing of the various flowers can be fairly well gauged, yet Nature is a capricious dame and often upsets our calculations. Yet she acts on broad general lines, and we can calculate on her providing us with snowdrops, primroses and daffodils in the spring; roses and poppies in the summer; nuts and acorns, apples and pears and tinted leaves in the autumn; and holly berries in the winter. So that we can draw up *general* season schemes, but woe be to that rash individual who dares to allot a date to Nature's productions! Disappointment only awaits him. The *special* arrangement of your scheme must be developed week by week, and it will not form a properly-connected whole until the end of the term.

Again, many town schools neglect very simple means of providing material for Nature study. There are practically few where bulbs are grown in glasses and pots, and window-boxes planted with seeds placed in sunny window ledges. In how many is the simple experiment of germinating seeds practised? Not a very large proportion, I am sure. And why is it? Is it not for lack of real interest in Nature? There are, alas! only too many of us who have outgrown our childish joy in the wonderful world around us. Charles Kingsley, in his delightful book *Prose Idylls*, has a word to say about this. He says:—

"Is it merely a fancy that we English, the educated people among us at least, are losing that love for spring which among our forefathers rose almost to worship? That the perpetual miracle of the budding leaves and the returning song-birds awakes no longer in us the astonishment which it awoke yearly among the dwellers in the old world, when the sun was a god who was sick to death each winter, and returned in spring to life and health and glory?" But one needs to read the whole essay. It makes one realize what we lose by our unimaginativeness, our cold matter-of-fact worldliness, when we compare ourselves in this respect with those "simpler children of a simpler age." We lack the "*joie de vivre*" of our forefathers, and we have found nothing to take its place. We want to be not only observers of Nature, but sharers in its pure, elemental joy.

To how many of us is the beautiful well-known passage of Wordsworth a reality to which we could put our signatures?

"Nature never did betray
The heart that loved her: 'tis her privilege,
Through all the years of this our life, to lead
From joy to joy: for she can so inform
The mind that is within us, so impress
With quietness and beauty, and so feed
With lofty thoughts, that neither evil tongues,
Rash judgments, nor the sneers of selfish men,
Nor greetings where no kindness is, nor all
The dreary intercourse of daily life
Shall e'er prevail against us, or disturb
Our cheerful faith that all which we behold
Is full of blessings."

Oh! let us cultivate that love of Nature which has been the inspiration of so much of our best art and literature. Without it our teaching must be formal, dull and lifeless. We must be Nature students before we can be Nature teachers. It is imperative. We must learn to notice—

"All the beautiful changes and chances
Through which the landscape flits and glances:
And to see how the face of common day
Is written all over with tender histories
When you study it that intenser way
In which a lover looks at his mistress."

—*Lowell.*

It is very useful in one's general reading to keep a little note-book on hand, in which to jot down ideas or hints that one often meets with. Many times in looking through books and papers one thinks—"Now that would prove very useful to illustrate so-and-so," but when the time comes to prove

its applicability, the book is forgotten. If the points were jotted down in short form—just the subject, title of book and page, reference would be made easy and one's schemes enriched considerably. That is one reason why it is useful to have schemes drawn out three or six months ahead. If every member of the staff knows the lines of the work which is to be taken, she can be on the look-out for pictures, anecdotes and matter wherewith to enrich her schemes week by week. This receptive, alert attitude is a valuable antidote to getting into a groove of working and thinking which is to be so much deplored.

Here too I must mention a point that impresses itself more and more upon me as time goes on. That is, the barrenness of many people's minds with regard to the best passages of prose and poetry in our literature dealing with the wondrous and varied aspects of Nature. I have already mentioned Kingsley's *Prose Idylls*. How many are lovers of the sketches of Richard Jefferies, couched in language delicate and picturesque as Nature herself? Who could not give a better lesson on summer-time after reading his inimitable *Pageant of Summer*? Reading that, on the dullest of dull winter days, one is instantly transported to the time when summer reigns supreme. With him—

> "We sit in the warm shade and feel right well
> How the sap creeps up and the blossoms swell."
>
> —*Lowell.*

The murmurous music of the tiny insects as they flit from flower to flower, the full rich song of the birds, the slumberous heat of the noontide, as the sun climbs higher and higher in the blue of the June sky; the warm scents of the blossoms scattered so lavishly on the hillside, the gorgeous colours spread everywhere by the wondrous loving hand of Nature: all are ours, made living and real to our minds as we wander with him, and realize that:—"These are the only hours that are not wasted—the hours that absorb the soul and fill it with beauty."

Or take the essays of Grant Allen, or Thoreau, that recluse who lived for long without human companionship so close to the great heart of Nature! the poetry of Wordsworth, Shelley, Keats, Tennyson! Would not our lessons be more literary in style, more picturesque in language, more true to life, if our minds were stored with these priceless word-pictures, painted for us in such glowing language by our best writers?

And such pieces as the simpler nature poems of Wordsworth can be appreciated to a very great extent by children of seven.

> "A host of golden daffodils
> Beside the lake, beneath the trees,
> Fluttering and dancing in the breeze:

Ten thousand saw I at a glance
Tossing their heads in sprightly dance:
The waves beside them danced, but they
Outdid the sparkling waves in glee."

Such lines as these may easily be learned by them, and the whole poem admits of their understanding if it be intelligently explained to them.

There is a little book of poems by the Hon. Roden Noel (*Canterbury Poets*, 1*s*.). His friend and biographer, Robert Buchanan, says of him: "I have no hesitation in saying that no living poet whatsoever equals Roden Noel in wealth and variety, power and profundity of natural description." And to all Nature lovers I would recommend this little volume. His poem "Early April" shows his marvellous insight into Nature workings and his boundless sympathy with her.

In reading it, one feels the thrill and flush of the earth in the returning life of spring.

"Fairy windflower, wood anemones,
Delicate company under the trees,
Snowflake ruffled by a merry foot breeze—
Frolicsome, singing ærial glees:
Frail white stars of the wildwood."

"All the boughs are alive with a luminous green,
Leaflets uncurl fairy frills to the sheen,
Wings dip and dart over the woodland scene:
We listen and lighten, we know what they mean;
Spring has arrived in the wildwood—
Sing heigh! sing ho! for the woodland!"

Again, to quote single lines or couplets:—

"A still green foam of woods rose high
Over the hill-line into the sky."

"Anemone, starwort, bands in white
Like girls for a first communion dight,
And pale yellow primrose ere her flight."

"Shadowy folding mountains from the sea
Rise to enclose the bay's chalcedony."

"Horizons haunted with some dream-like sails."

"The rude, immense, straight pillars of grey pine."

All are perfect of their kind, and they are more beautiful still in their natural setting.

It may seem straining a point to lay such stress upon this general reading ; we may think that our children are too small to benefit by the increased richness and beauty of our thoughts. But it is not so. In his essay on " The Over Soul " Emerson says :—

" *That which we are, we shall teach,* not voluntarily, but involuntarily. Thoughts come into our minds by avenues which we never left open, and thoughts go out of our minds by avenues which we never voluntarily opened. Character teaches over our head."

In short, we cannot help ourselves. As we grow more spiritually-minded, more beautiful in thought, and therefore more pure and true, we must teach, we must train, insensibly, to higher things. As Tennyson says :—

" To look on noble forms, makes noble."

and—

" We needs must love the highest when we see it."

Therefore, knowing that it is what we are, not so much what we say or do, that matters, it is our plain duty to fulfil the injunction of the great Apostle of the Gentiles, and to think or to dwell upon " whatsoever things are pure, whatsoever things are lovely."

This for the teachers, and now what for the children ?

I must not forget to tell you that we have a garden and a sand beach. We used to have a miniature hayfield, where we indulged in hay-making on a small scale during the summer. But as we needed more garden, we sacrificed our hayfield. We get a man to turn up our ground for us in the autumn, and during the rest of the year we do our own gardening. Until last year we confined ourselves to growing flowers, but last year we had vegetables as well. We grew potatoes, cabbages, cauliflowers, kidney beans, lettuce, onions, radishes and beetroot. These provided us with some very interesting Nature and expression lessons. In the spring we have snowdrops, crocuses, daffodils, narcissi, tulips and hyacinths in the garden. Besides the bulbs grown there each class plants some in pots in its own classroom, and each class has also a hyacinth growing in a glass. The growth of this bulb is especially watched and noted as a type, and painted in its various stages of growth. Each time it is painted, one child's work is selected to go on the brown paper sheet on the wall, inscribed with the legend, " Growth of our bulb."

Besides the growth of bulbs, which is made the basis for general lessons on plant life, the children study at this time of year the development of tree buds. At this present moment we have twigs and buds of oak, ash, horse chestnut, sycamore, hazel, elm, willow and beech in water on the window-sills of the classrooms, and there they will stay and grow until the time of their

full leafage. Week by week the children notice their gradual unfolding, and Nature study of this kind is invaluable.

In the spring we study germinating seeds. Peas, beans, mustard and cress, maize, wheat, etc., are germinated in various ways ; some on flannel, some in sawdust, kept in a tin tray, about 2 inches deep, and frequently moistened, some in soil. Those kept in damp sawdust are the most successful. Last year we had quite strong and vigorous bean plants from this experiment.

Then, too, we keep a Nature calendar, whereon we record all the discoveries of the children with regard to the returning life of spring. They think it a great honour to have their names on the calendar, which is fastened to the wall in a prominent position. This contains very useful information, showing as it does the dates on which the first primroses, violets, etc., were seen. Of course the facts must be well authenticated before being entered, or they will not be reliable.

Our calendar for this spring was as follows :—

Nature Calendar for February

Date	Name	Object Observed	Remarks
7th .	Gladys. .	Yellow Crocus	There is one flower in the school garden. It is not very tall.
9th .	Fred . .	Mist . . .	There was mist in the streets and fields this morning. It looked like the steam from the kettle.
9th .	Gladys .	Daffodil . .	A daffodil is nearly out in Gladys's garden.
10th .	Evan and Eustace	Hazel Catkins .	Found in the hedges.
13th .	All the Class	Hyacinth . .	Our white hyacinth has opened.
14th .	Miss W. .	Willow Catkins	On the road to school.
15th .	Lionel . .	Primroses . .	Flowering in the gardens.
16th .	Cecilia . .	Winter Cherry and Wallflower	Cissy brought them from her garden.
19th .	Margaret .	The Moon . .	There was an eclipse of the moon between six and seven o'clock.
20th .	All the Class	Daffodil . .	Our daffodil in the pot was open this morning.
26th .	Ethel . .	The Weather .	Sleet came down in the night.
28th .	Fred . .	Horse Chestnut Buds	They have begun to open in our classroom.
28th .	Gladys .	Crocus . . .	The crocuses in the garden are closed because it is so cold.
28th .	George .	Sweet Violet .	George brought the first wild one.
28th .	Emily . .	Onion . . .	Our onion in water has put out roots.

Nature Calendar for March

Date	Name	Subject	Remarks
1st	Ethel	Daisy	Brought a root with seven buds.
2nd	Eustace	Primrose	Found some in a field.
3rd	Gladys	Coltsfoot	This is a very early flower something like the dandelion.
6th	Fred	Onion	Our onion in water has a green sprout.
7th	The Class	Seeds	To-day we set peas and beans in our class-room in damp sawdust, and wheat, oats, mustard and cress on flannel.
8th	Walter	Nest and Eggs	In a hedge Walter saw a nest with three blue eggs in it.
9th	May	Onion	May brought one grown in a bottle. It had fine long roots and leaves.
9th	James	Polyanthus	Brought one to school.
13th	Vincent	Horse Chestnut	Vincent found one with a long root.
13th	The Class	Seeds	Our cress and peas are putting out roots.
16th	Joe	White Violets	Brought bunches to school.
17th	Cissie	Crocuses	Cissie brought two purple ones. The ones in our garden are all yellow.
20th	Ethel	Birds' Nest	Ethel saw a bird carrying straw to build its nest.
20th	Willie	Swans' Nest	The swans in the pond near the school are making a nest.
21st	Teddie	Chickens	Teddie had five chicks hatched out this morning, and by this afternoon there were eight.
22nd	The Class	Seeds	Our mustard has roots now.
22nd	Joe	Butterfly	Joe saw a yellow butterfly.
23rd	Ivor	Mare and Colt	Ivor's uncle has a colt, and when you go into the field the mare runs at you.
26th	Edgar	Hyacinths	There are hyacinths in our school garden.
26th	Vincent	Oxlip	Vincent brought one to school.

Nature Calendar for April

Date	Name	Subject	Remarks
1st .	Eustace .	Cowslips . .	They are just beginning to come out.
2nd .	Evan . .	Bluebells . .	Brought some in bud.
4th .	Gladys .	Rose . . .	Brought one from her garden.
7th .	Emily . .	Wild Pansies .	These are little wild white ones.
12th .	Miss W. .	Buttercups .	Brought the first buttercups of the year.
12th .	The Class .	Butterfly . .	We kept some chrysalides in the cupboard during the winter, and this morning a butterfly came out.
13th .	James . .	Swallow . .	Jimmy and his father heard a swallow cry, and then they saw one fly across the railway lines.
13th .	Edgar . .	Cuckoo Flower	Found some while out for a walk.
14th .	James . .	Cuckoo . . .	Jimmy both saw and heard the cuckoo this morning.
20th to 30th *Holidays*	Albert .	Birds' Nest and young ones	Albert saw young birds in a nest in the hedge.
	Eustace .	Skylarks' Nest.	Eustace found the nest in a field. It was sheltered and protected by a brick.
	George .	Wild Ducks .	These were seen in the holidays, some flying and some swimming.
	Joe . .	Moorhen . .	Joe saw one which had been caught by a big boy.
	Eva . .	Early purple Orchis	These are just beginning to come up. The children call them butcher boys.
	Lionel . .	Apple Blossom.	The apple trees are now in bloom.

This year, in addition to growing peas, beans, etc., in school, we gave the children some to take home and plant for their own personal and private observations. They were intensely interested, and ever since the seeds began to sprout the children have kept us perfectly posted with up-to-date information about their own specimens, on several occasions bringing their possessions to school with the proud joy of ownership and cultivator.

Last autumn we had a box of acorns sent us. The majority of these we distributed among the children, and their growth has been watched most diligently. Several of the older children have miniature oak trees, vigorous and sturdy, growing in bottles at home, and their remarks from time to time show that they have noticed minutely and carefully the evolution of oak tree from acorn.

How much more real and accurate is the knowledge of children who are trained in this way than that of children who have occasional spasmodic Nature lessons on any subject which comes to hand! In this way, patiently watching and waiting, they get insight into the workings of Nature herself. Little by little grows the root, inch by inch the stem grows taller, leaf by leaf unfolds the bud, all the time intelligently noted by the children. They can never forget things brought under their notice in this way.

In the summer we have flowers grown from seed, chiefly poppies, cornflowers, sweet peas, nasturtiums, climbing and dwarf Virginian stock, Canterbury bells, carnations, candytuft and mignonette. Then we have some nice wallflower plants, and a tall pink hollyhock, while our trellis-work is wreathed with hops. In the early autumn we have literally thousands of dwarf sunflowers, making the garden one blaze of golden light, and later a few chrysanthemums.

I cannot tell you what a boon this little garden is. Each class has one special day in the week when, if warm and fine, they may spend a short time, from fifteen to thirty minutes, in the garden, noting the changes that have taken place since their last visit, and weeding and watering. Each class has also its own special bed or beds, for which it is responsible, both for sowing seeds and tending them; and I have overheard many a heated and wordy argument over the respective merits of the various beds. We have to pass the garden on our way into school, and I suppose we rarely accomplish this passage on summer mornings without being taken by the hand and hailed with the proud joy of ownership to "look at what's come up in *our* bed!" Every interval finds the children round the garden, their little noses and hands pressed into the trellis-work, and, alas! to tell the truth—the sad truth—their little feet also. I frequently have to be humbly and deeply apologetic to the surveyor for those "unaccountable" holes. Unfortunately he sometimes gives my children's pardonable curiosity and interest another name.

Thus our garden provides us with a good quantity of material for our Nature work, but not by any manner of means as much and as many varieties as we need, especially between seasons. In order to get these we have formed a flower club, which consists of the whole staff. Each pays 1*d.* per week, and this is collected by our treasurer, who was elected by vote. She takes the responsibility of getting a sufficient quantity of flowers each Saturday, and sometimes on Wednesday. Then these are used by the different classes. All the teachers settle the week before what flower they will take, and this saves a duplication of expense. This is for such flowers as have to be bought. Many weeks we get our flowers, etc., from field, wood or garden, and then the weekly money accumulates for such time as we need expensive luxuries ; and occasionally we add a new fern to our stock of plants in the hall, or a vase or two.

In a girls' school a decoration society of this sort is easily formed. The girls put spare halfpence into a fund, and a bare-looking school can soon be furnished with flower pots, vases, hanging baskets and plants. I know a school where this is done. They have a " Kyrle " society, and the Standards VI and VII girls are responsible for the buying and arranging. The building dates from 1848, and is anything but a desirable one from a picturesque point of view, but any one entering the room cannot fail to receive a pleasant impression from the dainty and artistic way in which it is decorated. Even in winter the vases and baskets are kept green with sprays of trailing ivy.

From this it will be seen that our children have plenty of opportunity for studying plant life as it should be studied, not just in the finished product, viz., the perfect plant, but in its evolution from the planting of the tiny seed to the reproduction of seed, through every stage of growth.

With regard to animal life we have not been able to do so much. Our school pets are a dove, a canary and some goldfish. We have tried to keep a kitten more than once, but I do not think it found the atmosphere ot school at all congenial to its taste. In each case it disappeared after a few days, although we rubbed its feet with butter in the time-honoured way. I have been offered rabbits and white mice, but as our Education Committee do not see their way to supplying us with the accommodation for them I have had to refuse the offer *pro tem.*

With regard to evolution, we have managed frogs and also butterflies. Each class has had frog spawn developing for some time, and the children derive much amusement as well as benefit from watching the lively tadpole in his metamorphosis. Chrysalides have also been kept through the winter, and great was the delight of Standard I when on April 12 a butterfly was found flying about where a chrysalis had been on the previous day I think they felt rather sorry when, after imprisoning him in a glass jar, with flowers

THE MUSEUM.

in which a little sugar and water had been dropped for his delectation, so that every child might have an opportunity of looking at him, we let him fly away into the sunshine. We do the same with bees sometimes: put them in a glass jar with fresh clover blooms, and cover the top with fine net. In this way the children can observe the living creature without any element of cruelty, for the insects are always liberated at the close of the lesson.

But we have had other animal visitors brought by the children. Chickens, ducklings, a tortoise, a lamb, a dog—all have paid a visit to school at one time and another; while the children have been taken out into the fields to watch the cows, horses and goats. This year we have had a special object of interest. Two swans have made a nest in a pond quite close, and the children have spent some time in watching how that nest was made. One day they noticed a very interesting little scene. The two swans were busy weaving the inside of the nest. By-and-by one of them got on to the top and sat down, evidently to test it. She rose hurriedly, got down again, and putting her long neck inside the nest, she tugged at something which she had no doubt found not entirely comfortable, and threw it from her violently. The children were most amused, and came home full of it.

In these ways we try to study animal life in its natural habitat as far as possible.

I should like to say once more, even at the risk of being wearisome in my repetition, that teachers of young children should do everything in their power, in season and out of season, to make children humane. How true it is that—

"Evil is wrought by want of thought as well as want of heart."

It is not deliberate, planned cruelty of which we accuse the child, but thoughtlessness. The child of three is attracted by the quick, glancing movements of the fly, catches it, and then proceeds to divest it of its legs and wings. Who shall accuse the little one of wilful cruelty? It is not that at all. May we not say that the child is obeying an unrealized instinct for finding out the cause of its (the fly's) movement, that movement which is the cause of his attraction? It is the same impulse which creates that ever-present curiosity about the mechanism of a watch. But by degrees the child can be checked and taught to realize that such conduct gives pain, and that in the animal world, too, the golden rule still holds good: "Do to others as you would have others do to you!" Children should be used to the companionship of animals, should have pets. No child who has been used from its earliest days to the care of pets can be guilty of an act of wilful cruelty to an inmate of the animal world. His association with his kittens, dogs, birds, mice, rabbits, etc., will make him realize his oneness with them as

nothing else can do, and he will feel any injustice or cruelty to these dumb creatures, who are such faithful and true friends to man, as he would feel such an act in his own person.

I always attribute my own intensely strong love for and sympathy with animals of every variety and size to the keeping of multitudinous pets. During our childhood's days we had a regular menagerie of animals, including cats, kittens, dogs, rabbits, white mice, dormice, doves, canaries, goldfish, a tortoise, and occasional frogs and toads. We had also a small white goat, which, in company with a dog, used to take its walks abroad with us, much to the amusement of our fellow pedestrians. Naturally our sympathy with animals was great. And I believe it possible to train the sympathies of all children in the same way, not all to the same extent, but to a sufficient extent to keep them from acts of wilful cruelty. Of course, a naturally loving and sympathetic nature will be touched to finer issues, but in every case, love of and reverence for animal life can be implanted and cultivated.

And the Nature story will play a great part here. In the stories, animals are represented to them as thinking and speaking in like manner as themselves. This will make them realize their kinship with these dumb friends, and their obligation to be thoughtful and kind.

I have said before that school excursions form a feature of our work in connection with Nature study. As the school itself is situated at the point where town and country meet, while the sea is no further off than two and a half miles, we are rather fortunate in having a somewhat varied district for our explorations. Once during the summer, every class, including the babies, spends an afternoon by the sea, revelling in the soft sand, of which there is a great sweeping expanse ; watching the sailing-ships and steamers as they pass their way to or from the docks ; gathering beach treasures of every kind imaginable ; and deafening the ears of their elders with joyous shouts of discovery, appreciation and delight. A brake proprietor reduces his fare for them on these occasions, and by dint of packing the children in on seats and floor—not to mention each other's laps—they get taken for 1*d.* return fare. They come on their special afternoon looking so spick and span —the poorest of them with at least clean faces and hands. Spades and buckets, pennies to spend, little packets of lunch, each and all have to be jealously guarded. This is on the outward journey. What a contrast they present when they return ! Wet to the knees are some of the most adventurous ; grimy about the face and hands, sticky about the mouth — this is the general condition of the boys ; while even the little girls have lost that pristine freshness with which they started. With hats on the backs of their heads, pinafores rolled up to the waist, some of them dripping with the decidedly moist condition of seaweed and other treasures contained therein.

But, oh ! the happy faces and the blessed memories of that afternoon by the sea.

I have previously stated that many weeks we get our material for Nature study from fields, woods and hedgerows. This brings me to the subject of walks. We have no special day or time set apart for these ; it depends entirely upon the subject on hand and the weather ; but in the summer they are taken frequently, and as a rule the children start at 2.30 or 3 o'clock, according to the distance. In the case of Standard I, the excursions usually occupy the whole afternoon, as they can go farther afield, and frequently have to combine geographical research with Nature study.

During these excursions a great quantity of material can be collected. Once the children are trained to be observant out of doors, their keen young eyes will often find rare objects and specimens which might escape the notice of their teacher, and a great deal of outdoor knowledge is gained in this way. We always make a point of telling the children the object of the walk, what we are going to look for, otherwise it is apt to become loose and purposeless. If you are going to look for just anything, you may end in finding nothing ; but if you have a very definite idea of what you are looking for, the chances are that, if it is to be found, you will find it.

But the use or misuse of this valuable aid, not only to Nature study, but to child study, depends upon the teacher. If only she is a keen student and lover of Nature, capable by her intelligent conversation with her class of stimulating their highest curiosity and rousing and utilizing their natural delight in all things bright and beautiful, this walk will be one of the most fertile sources of real education that it is possible to find. Children who rarely speak in school, except to answer one, suddenly find their tongues in a manner that seems little short of miraculous when going for a walk. It has been noticed over and over again. But, as I said before, this depends almost entirely upon the teacher's power of arousing and stimulating this interest in the children.

If during the autumn the children are encouraged to pick up any fallen leaves that are intact, they can be pressed and mounted on white cardboard, each leaf on a separate card. Thus preserved, they provide many an hour's pleasant work in painting, modelling and drawing in the winter. I have some that were collected in the autumn of 1902, and they are still in use, though grown rather brittle and needing careful handling. Those collected in the next year, including Virginian creeper and tinted blackberry leaves, are nearly as fresh and vivid in colour at the present moment as when they were mounted.

For the guidance of those who have not tried this, the following hints will be useful :—

Press the leaves as soon as possible, while they are perfectly fresh, after having previously closed the ends of the stalks with a little sealing-wax. Lay them between blotting-paper, seeing that each leaf is quite flat, and place the blotting-paper beneath some heavy weight. Large books are excellent. Leave them alone for at least three weeks, until all the moisture has been absorbed by the blotting-paper. Then take them out carefully.

Lightly gum the backs, taking care to put only a very little. See that the tip of each leaf and the end of each stalk are properly gummed, or they may curl back and break. Then mount them on cards, in various positions, so as to give the children practice in drawing lines in different directions. It is not well to keep these cards in a pile, as they rub against one another, and as the leaves get old they will crack and break off. The best thing to do is to stand them up, and, placed in a museum cupboard, they are quite an ornament to the school. Large sprays of beech, hazel, oak and maple are very effective done in this way. They give opportunity for advanced work with the older children, and are very useful for lessons on trees.

In concluding this chapter, I give an account of a Nature study walk taken by Standard I, and kindly written for me by the teacher of this class. It will speak more plainly than anything else of the spirit in which these excursions are taken. I ought to say that we discourage the idea of taking roots of plants from their natural surroundings, or in any way despoiling Nature. Birds' nests and eggs are never touched, and consideration for the lowliest of animals is inculcated in every possible way.

A NATURE WALK

Shortly before 2.30 I informed my band of fifty explorers that we were going for a walk, not to play—with much emphasis—but to look at the trees and find "seed-boxes," our Nature lessons for a fortnight having dealt with this subject. In a few minutes we were on the road, walking two-and-two at first to cover the ground more quickly. As soon as we were past the last house, permission was given to break ranks, at which twenty joyfully excited boys charged down the road at full speed, and had to be chased and recalled to a sense of the seriousness of the expedition. The real business began when we turned off the high road into a lane, bordered on one side by a stream and on the other by a dyke. Here blackberry bushes claimed a good deal of our attention, but we found leisure to notice the prickly teazle heads, with their wind-scattered seeds; while in the stream, we found sedge with its prickly balls, tall grasses and beautiful blue forget-me-not. Winnie brought up a head of buttercup achenes for inspection. "Please, is this a seed-box?" and we had to look and see that it was not one seed-box, but a number, each with its one seed inside. Further on, the blackberry bushes gave place to

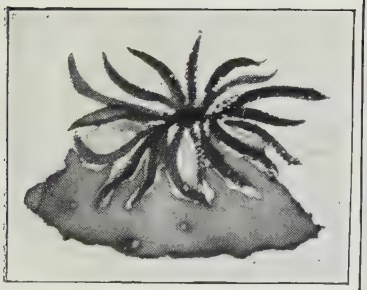
hedges of rose bush and hawthorn, filled with their scarlet fruits. These were old friends. We remembered how the birds come to peck at them and eat the juicy covering, dropping the seeds on the ground so that new plants spring up. Here, also, were maple and other bushes, with leaves turning brown and gold and crimson, recalling our autumn song about the " tinted leaves." By this time the two adult conductors of the expedition had become just a trifle deaf from the joyful shouts which arose at each fresh discovery, from questions asked five or six at a time, and kind offers of very special finds.

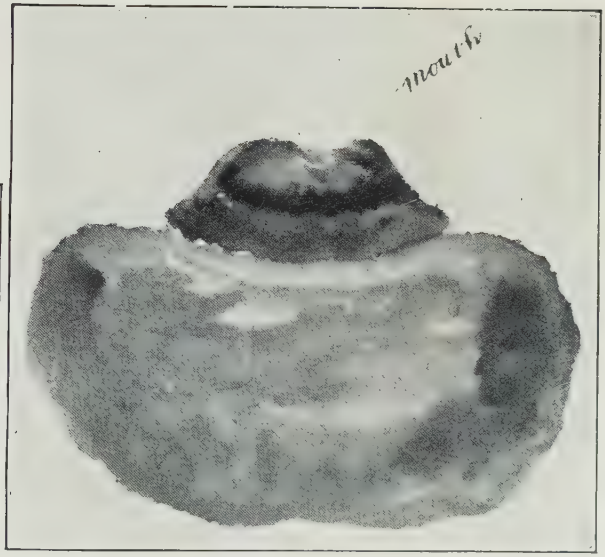
But the climax was reached when, at the end of the lane, we came to a tiny triangular wood, enclosed by a low stone wall. When I reached it with the rearguard, the advance party had already been busy, and bore down upon us in great excitement, their hands full of leaves, picked up under the trees or pulled from the lower branches. The teachers were expected to give immediate and admiring attention to the treasures of at least a dozen children at once : " Look at mine " ; " See what big ones I've found " ; " Mine are changing colour at the edge " ; " Look ! mine has little buds on it." Sycamore, horse-chestnut, beech and ash leaves were soon recognized, and perfect specimens obtained " to take back with us to press." Then the question arose : " Can we find the seed-boxes of these trees ? " and fifty children were soon scouring every inch of the ground like so many little squirrels in search of food. Beech nuts were first found, some still closed up, others split into their four divisions, showing the three-cornered nuts inside ; others again widely open and empty. We put a generous supply into our pockets to take back for modelling. Empty horse-chestnut burrs were plentiful, but we thought the squirrels must have had all the nuts, until Evan found just one—a beauty. At first he thought he would keep it for a " conker," but afterwards generously handed it to me for the general collection. The winged seeds of the sycamore and ash baffled our search for some time. They fall so early, and the wind had already scattered them. At last, however, one was found, the wing already reduced to a skeleton, and eventually we found quite a number in more or less advanced stages of decay. Of course, the more adventurous spirits occasioned some anxiety by climbing walls and even trees before they could be told not to ; but, after all, it was in the interests of science, and no accidents occurred.

At last, hands and pockets were full, and also time was flying, so we had to scramble out regretfully into the lane and turn our steps homeward. The return journey was beguiled by throwing up the sycamore seeds to watch them come twirling and fluttering down, and by much conversation. " Haven't we had a nice walk, and isn't it nice it kept so fine ? " " We'll go to that wood again when we come out, won't we ? " were among the numerous

remarks addressed to me; and Lionel said: "I call that a lucky wood." "Why, Lionel?" "Because we find so many nice things there."

We reached school rather late, but very well contented with the results of our expedition. All the children came in and deposited their burdens on the classroom table. Three or four stayed behind to help put away the seeds in boxes, and the twigs into water, and finally to carry out into the field armfuls of withered leaves, which really could not be kept, though they undoubtedly possessed great beauty and interest in the eyes of the little collectors. The Nature lesson of the next day was spent in talking over what we had seen and gathered, and indeed the experiences of that afternoon afforded material for many a chat and illustrations for a fortnight's lessons.





TEACHER'S ILLUSTRATIONS FOR SCHEMES (see p. 63).

SCHEMES OF WORK FOR THE SEASONS

Autumn Scheme

Stories	Nature Lessons	Songs, Games and Recitations	Kindergarten Occupations
The Story of Daphne. The Last Dream of the Old Oak. The Walnut Tree that wanted to bear Tulips. Philemon and Baucis. Iddly Bung's April Christmas Tree. The Wishing Nuts. Nutcracker.	The Value of Trees. How a Tree starts and grows. Trees that bear Cones. Trees that bear Nuts. The Oak Tree. The Beech Tree. The Horse Chestnut Tree. Nuts and Nut Eaters. A Family of Squirrels.	*Songs.* Autumn. The Brown Birds are flying. The Autumn Wind. Do the little Brown Twigs complain ? Above the spire. *Games.* The Squirrel. Within the Woods. The Market. The Reapers. The Windmill. The Waterwheel. Little Bakers. How the Corn grew. *Recitations.* Ploughboy's Song. The Mountain and the Squirrel. The Tree. Gathering Apples. Gathering Blackberries. The Little Mushroom Girl. The Wild Wind. November. From Little Things. Song of the Poppy. Our Pips. Apple-seed John.	*Brushwork and Colouring.*—Sprays of oak leaves and acorns; a sprouting acorn; sprays of beech and hazel; a horse-chestnut leaf; squirrels; fir cones. *Modelling.*—Acorns; horse chestnut burrs; walnut; beech nuts and mast; hazel nuts. *Drawing and Paper Cutting.*—An oak leaf; a horse chestnut leaf.
The Golden Apples. The Story of King Midas. Blackberrying. The Fairy's Umbrella. The Biter Bit. How West Wind helped Dandelion.	Autumn in the Orchard. Apples and Pears. Plums. Autumn in the Lanes and Hedges. The Blackberry Bush. Hips and Haws. Autumn Leaves. Mushrooms. How Plants store up Food. Seed Boxes. How Seeds travel. How Plants defend Themselves.		*Brushwork and Colouring.*—Apples and leaves; pears and leaves; plums and leaves; sprays of blackberries; hips and haws; autumn leaves; various seed boxes, poppy, etc. *Modelling.*—Mushrooms, apples, pears, plums, apple pie, bottle for preserving plums; rose hips and haws; potatoes and other food reserves. *Drawing.*—Dandelion head in seed; burrs and other prickly seed boxes; plants with spines and hooks. *Drawing and Paper Cutting.*—A basket for mushrooms; blackberries and nuts. *Stick Laying.*—Ladder for gathering apples.
A Dream in Harvest. The Breeze and the Mill. Stories of Hiawatha. Nero at the Bakery. The Haughty Harvest Mouse. The Spiteful Field Mouse	Cutting the Corn. The Miller and the Mill. Flour and Bread. The Baker's Shop. The Flowers of a Corn Field. The Harvest Mouse and its Relations.		*Brushwork.*—Wheat, oats, barley, poppies, corn cockles, convolvulus, bindweed. *Colouring.*—A windmill, a waterwheel, a waggon. *Modelling.*—A sickle, a loaf, biscuits, a peel. *Paper Folding.*—Baker's cap and apron. *Drawing.*—Baker's basket and cart; harvest mouse and nest; a windmill; sacks of flour.

Winter Scheme

Stories	Nature Lessons	Songs, Games and Recitations	Kindergarten Occupations
The Fir Tree. Baldur the Beautiful. The Snow Man. Father Christmas. The Mail Coach Passengers. The Young Helpers' League.	The Fir Tree. The Holly Tree. A Spray of Ivy. Mistletoe. Evergreens. A Snowstorm. Christmas Time. A Christmas Tree. A Christmas Pudding.	*Songs.* Sleighing Song. White Little Cloudlets. Little White Feathers. In the Snowing and the Blowing. "Thank you, Pretty Cow." Father Christmas. Robin. *Games.* Santa Claus. The Blacksmith. The Lambs. The Goats. Little Brown Sparrows. Miss Pussy's Dinner. The Fox and the Grapes The Fox and the Geese. The Snail Shell. I lead my Lambkin. The Snow Man.	*Brushwork and Colouring.*—Sprays of fir, yew, holly, ivy, mistletoe. *Modelling.*—Christmas pudding and dish; oranges, nuts, etc., for the Christmas tree; candles for tree. *Drawing.*—A Christmas stocking, a doll, a trumpet, a drum, a Christmas tree in a tub. *Drawing and Paper Cutting.*—An ivy leaf, a holly leaf. *Stick Laying.*—Tree in a tub, church window and door. *Colouring.*—Picture of Santa Claus and sledge.
Red Snow. The Story of Pegasus. Country Scenes. Ulysses in the Cyclops' Cave. Angels Unawares. The Birds' Christmas Tree. Daily Bread. The Happy Family. Purring when you're Pleased. Beauty and the Beast. The Three Bears. The Adventures of "Blackie." Stories of Brer Rabbit. Father Fox. Snow White and Rose Red. Story of the Golden Fleece.	The Farm in Winter. The Horse and Donkey. The Cow. The Sheep and Goat. The Garden in Winter. Birds in Winter. The Robin. The Sparrow. The Starling. Animals that sleep in Winter. The Covering of Animals. Winter and Summer Coats. Eyes and ears of Animals. The Feet of Animals. The Polar Bear. Animals with Fur Coats. The Cat. The Rabbit. The Fox. Life in cold Countries. Our Winter Clothing.	*Recitations.* The North Wind. The Winter King. Jack Frost. Willie's Robin. Winter. The Christ Child. The Land of Story Books. The Beggar Man. A Christmas Visitor. The Pines. Hang up the Baby's Stocking.	*Brushwork.*—The robin; clover and oats; carrot; Esquimaux' hut and sledge; a snail; a snake. *Colouring.*—The horse, donkey, cow, sheep, goat, robin, sparrow, starling, bat, mole, hedgehog, snail, cat, rabbit, fox, polar bear. Picture showing Esquimaux' hut, sledge, etc. *Modelling.*—Horse shoe; anvil; hammer; milking stool; cup and saucer; milk jug; teapot; kettle; saw. *Drawing.*—Ears and feet of various animals; a bat; a mole; a snail; horse's feeding bag; stocking; boot; gloves; hat; cap. *Stick Laying.*—Gate of field; cow shed; rack for food; rabbit hutch; a bird box; manger; fowl-house. *Paper Folding.*—Roof; barn. *Drawing and Paper Cutting.*—A milking pail; a milk-can; a horse shoe.

Spring Scheme

Stories	Nature Lessons	Songs, Games and Recitations	Kindergarten Occupations
Baby Calla. Fairy Tales from Flower Land. A Wild Flower's Ball. The Story of the Year. The Light of Life. Two Peas in a Pod. Jack and the Beanstalk. Stories of Narcissus and Echo.	Spring time at the Farm Spring in the Garden. Wild Spring Flowers. Plant Food in the Soil. Plant Food in the Air. Germination of Seeds. How a Bean grows. What is a Bulb ?	*Songs.* Spring is here. The Violet. The Daisy. "Awake," said the Sunshine. All the birds have come again. The Cuckoo. The Swallows. A little white Daisy. Sunshine Song. *Games.* Hidden away, just under the Ground. In a Hedge. Little Birdies. In my little Garden Bed. The Trees. Good Mother Hen. Ducky Duck Dillies. The Frogs. The Fishes. The Little Gardener. *Recitations.* The Garden. Food for the Flowers. The Snowdrop. The Violet. The Daffodil. The Boy and the Birds' Nest. The Blackbird. A Nest in a Pocket. The first Swallow. The Cuckoo. The Voice of Spring. Twenty Froggies went to School. Flower Chorus.	*Brushwork and Colouring.*—Snowdrops, crocuses, tulips, violets, primroses, daffodils, cowslips, bluebells, hyacinths, etc., with their leaves. *Modelling.*—A flower pot and saucer; a hyacinth bulb; beans and peas; tulip and leaves. *Drawing.*—A hyacinth glass; spring flowers. *Stick Laying.*—Garden fence, gate, beds.
Story of Persephone. The conceited Apple Branch. The Wishing Nuts. The Maple Leaf and the Violet. The Story of the Laurel. The Story of the Poplar Tree. The Ugly Duckling. Story of Orpheus. The Self-deceived Magpie. Mrs. Dove's Nursery. The Passionate Sparrow. The Artisan's Wonderful Wings. Farmer Trueman's Cage. Little Tiny. The Wild Swans.	Springtime in the Woods. Leaf and Flower Buds. Catkin-bearing Trees. The Sycamore and Maple. The Ash Tree. The Poplar Tree. Birds we know. Songs of Birds. Nests of Birds. Birds' Eggs. How Birds feed their Young. Where Birds sleep. The Cuckoo. The Skylark. Our Bird Visitors. The Swallow. Bird Enemies. The Swan.		*Brushwork and Colouring.*—Twigs and buds of ash, sycamore, oak, horse chestnut, etc., in various stages of development; branch of tree with birds' nest in fork; studies of birds; catkins. *Modelling.*—Birds' eggs; birds' nest; catkins on twigs; tree buds; poplar leaf; ash leaf; sycamore leaf; carpenter's tools; swallows' nest. *Stick Laying.*—A tree; a bird cage for canary; an axe; a cart; hen coop. *Drawing and Paper Cutting.*—A sycamore leaf; a swallow; a swan. *Drawing.*—Any of the suggestions given for brushwork and modelling; studies of various types of birds' beaks and feet. *Basket Making, Cane Weaving, and Mat Plaiting* in connection with the weaving of a nest.
The Dragon-fly. The Frog Prince. The Childhood of Apollo and Diana. Mr. and Mrs. Stickleback.	A Pond in Spring. Tadpoles and Frogs. A Stickleback. A Minnow. Our Goldfish.		*Brushwork and Colouring.*—Tadpoles; frogs in various stages of development; bulrushes; water lilies. *Modelling.*—A fish'; a bowl for gold fish. *Drawing.*—A stickleback and nest; a minnow. *Stick Laying.*—A pond; an aquarium; railings round the pond.

Summer Scheme

Stories	Nature Lessons	Songs, Games and Recitations	Kindergarten Occupations
Arachne. Queens. The Tender-hearted Ant. The Beetle. A Lesson of Faith.	The Spider. Bees and Wasps. The Humble Bee's Nest. An Ant Hill. The House Fly. Beetles. The Butterfly. Flowers and Insects.	*Songs.* Summertime. The Bees. The Butterflies. The Flower Bed. The Forget-me-not. Happy Summer. Play Time. The Wild Bee's Lady-love.	*Brushwork and Colouring.*—Bees and butterflies ; a beetle ; spider and web. *Modelling.*—A beehive ; caterpillar on leaf. *Drawing.*—Skep for hive ; a jar of honey ; hexagonal cells ; chrysalis on twig. *Stick Laying.*—Bench for hive ; wooden hive.
Voices at the Gate. In the Palace of the Lilies. Five Peas in a Pod. The Legend of the Rose. The Daisy. Climbing Alone. Little Comforters. The Ungrateful Traveller. The Flower Fairies. The Holy Hay.	The Work of a Flower. The Garden in Summer. The Sweet Pea Family. The Rose Family. The Daisy Family. Climbing Plants. Creeping Plants. A Bunch of Grasses. Ferns and Mosses. Roadside Plants. Meadow Plants. A Hayfield.	*Games.* The Little Gardener. The Greengrocer. The Haymakers. A Little Boy's Walk. The Busy Bees. The Butterflies. The Caterpillar. The Raindrops. Oh ! how the wind is blowing. Gay Little Dandelion.	*Brushwork and Colouring.*—Sweet peas ; nettle ; wild rose ; bramble ; flower ; strawberry flower and leaves ; daisy plant ; honeysuckle ; poppies ; corn-flowers ; clover ; moon daisies, etc. *Modelling.*—Watering can ; spade ; rake ; hoe ; fork ; trowel. *Drawing.*—Parts of the various flowers in detail, sections, various kinds of common ferns. *Stick Laying.*—Garden paths ; wheel-barrow ; spade ; tool-house. *Paper Folding.*—Garden seat ; sunshade ; box for seeds.
Gifts. Jack and the Beanstalk. The Story of George Washington. Æsop's Fable of the Traveller. Stories of Hermes and Phaeton.	The Kitchen Garden. Seed Boxes which we eat as Vegetables. A Basket of Vegetables. Peas and Beans. Gooseberries. Black, Red and White Currants. Strawberries. Raspberries. The Cherry Tree. The Work of Sun, Wind and Rain.	*Recitations.* Flowers to Sell. The Strawberry Girl. The Raindrops. The Wind. The Song of the Grass. Little White Lily. Birds in Summer. Freddy and the Cherry Tree. The Bee. The Daisies. The Castle.	*Brushwork and Colouring.*—Pea and bean flowers ; pea and bean pods ; carrots ; turnips ; beetroot ; summer fruits with their leaves. *Modelling.*—Gooseberries ; string of currants ; strawberries, raspberries, cherries. *Drawing.*—Greengrocer's basket ; shopping basket ; pie in a dish ; pot for jam ; stewpan for fruit.

Spring Scheme for Standard I, based on Legends of Greece and Rome

Date	Central Idea	Stories	Nature Lessons	Suggestions
Week ending February 2.	The Cow.	The Story of Io.	Animals that chew the Cud. The Cow. What the Cow gives us.	*Game.*—The Cobbler (in connection with leather). *Song.*—The Friendly Cow (by R. L. Stevenson). *Recitation.*—The Cow (by L. Thomson). *Paper Cutting.*—Milking stool and pail. *Drawing.*—The head and foot of a cow.
Week ending February 9.	Sheep and Goats.	The Golden Fleece.	The Sheep. The Goat.	*Recitation.*—Little Lamb (by W. Blake). *Story* of Ulysses in the cave of Polyphemus (C. Lamb). *Drawing.*—Head of sheep ; head of goat ; feeding trough for sheep. *Paper Cutting.*—A turnip.
Week ending February 16.	Wool and Clothing.	The Golden Fleece (*continued*).	Wool—its Manufacture and Uses. Clothing. Winter Clothing.	*Recitation.*—The North Wind doth Blow. *Song.*—Little White Feathers (by E. Smith). *Game.*—Winter (by Keatley Moore). *Drawing.*—Winter gloves; gaiters ; skates. *Clay Modelling.*—A boot.
Week ending February 23.	Animals that crawl.	The Story of Perseus. How Perseus won a Wife.	Snakes. Worms.	*Stories* from *Frank Buckland Reader.* Visit to Zoological Gardens if possible. *Drawing.*—A snake ; the head of snake showing poison fangs ; a worm.

Date	Central Idea	Stories	Nature Lessons	Suggestions
Week ending March 2.	Pond Life in Spring.	The Childhood of Apollo and Diana.	Tadpoles. Frogs and Toads. The Plant Life of a Pond.	*Game.*—The Frogs (by Keatley Moore). *Recitation.*—Twenty Froggies went to School. *Painting.*—Tadpoles and frogs; specimens of plants from the pond. Tadpoles should be kept in school for a few weeks till they turn into frogs.
Week ending March 9.	The Coming of Spring.	The Story of Persephone. The Story of Hyacinthus.	Signs of Spring. The First Flowers of Spring. The Hyacinth.	*Game.*—Spring (by Keatley Moore). *Recitation.*—Flower Chorus (by R. W. Emerson). *Song.*—"Awake," said the Sunshine (by E. Smith). *Painting.*—Various spring flowers from Nature. Hyacinth bulb should be painted every week or so to show development.
Week ending March 16.	Spring Flowers.	Echo and Narcissus. How Narcissus Loved his own Image.	The Daffodil Family. Primroses. Wood Anemones.	*Recitations.*—To the Daffodils (by W. Wordsworth); Written in March (by W. Wordsworth). *Song.*—Spring (Scott Gatty). *Brushwork.*—Painting daffodils, primroses and anemones from Nature. *Paper Cutting.*—Daffodil leaf and primrose leaf.
Week ending March 23.	Tree Life.	Rhoecus (Lowell). The Story of the Laurel.	The Trees in Spring. Buds and their Development. Catkins.	*Recitation.*—The Voice of Spring (*Little English Poems*). *Game.*—The Trees. Twigs and buds of various trees to be developed in classrooms and drawn and painted in the various stages. *Painting.*—Hazel catkins.

Date	Central Idea	Stories	Nature Lessons	Suggestions
Week ending March 30.	Tree Life (*continued*).	The Story of Daphne. How a Wicked City was Destroyed.	The Flowers of Trees. The Uses of Trees. How to tell Trees.	*Recitations.*—The Tree (*Little English Poems*). Walks to be taken in connection with the subject of "How to tell trees." Tree flowers to be collected. *Drawing.*—Leaves of oak, elm, ash, beech, etc.
Week ending April 7.	Bird Life.	The Artisan's Wonderful Wings.	Bird Life in Spring. The Development of an Egg. Birds' Nests.	*Song.*—All the birds have come again (by E. Smith). *Recitations.*—The Blackbird (*Little English Poems*); Chanticleer (*Little English Poems*). *Clay Modelling.*—Various nests and eggs from Nature. *Paper Cutting.*—An egg. Walks to be taken to look at nests if possible.
Week ending April 14.	Bird Life (*continued*).	The Birds of Killingworth (Longfellow). Story of a Sweet Singer.	The Structure of a Bird. The Structure of a Feather. Bird Visitors in Spring.	*Recitations.*—The Cuckoo (*Little English Poems*); The First Swallow (*Little English Poems*). *Game.*—The Swallows (by Madame Michaelis). *Brushwork.*—A bird's wing; a feather. *Paper Cutting.*—A swallow. *Clay Modelling.*—A swallow's nest.
Week ending April 21.	The Spider.	A Web and a Spider. Ariadne's Thread.	The Spider. The Spider's Web. Weaving and Spinning.	*Story.*—King Bruce and the Spider. *Recitation.*—The Spider and the Fly. *Drawing or Painting.*—A spider and its web. Exercises in weaving—such as basket-making, mat-plaiting, etc.

Suggestive Scheme for a Town School

Stories	Nature and Object Lessons	Occupation Lessons	Miscellaneous
Ned, the Newsboy.	The Paper Boy. A Newspaper. How a Book is made.	*Brushwork.*—A carrot, a turnip, a tomato, etc.; apples, pears, cherries, etc.; wheat, oats and barley; a windmill; various flowers for the flower girl's basket; clover for the horse.	
The Story the Milk told Me. The Story of Io. The Cow that lost her Tail.	The Milkman. Milk, Butter and Cheese. The Cow.	*Sand Modelling.*—A public park; a garden; a river.	*Cow, Milk, etc.* The Trades Game (milkman) (Keatley Moore).
Henry, the Bootblack. Story adapted from *Water Babies.*	The Crossing Sweeper The Bootblack. The Chimney Sweep. Brushes.	*Clay Modelling.*—Milkman's can; pat of butter; a cheese; pail and stool for the milkmaid; loaf of bread; biscuits; rolling-pin; vegetables and fruit; policeman's helmet; postman's cap; carpenter's hammer, gimlet, mallet, etc.; cobbler's awl; a shoe.	*Sweeper, etc.* *Recitation.*—The Chimney Sweep. The Trades Game (sweep).
Lost in the City.	The Policeman. The Lamplighter.		The Lamplighter Game.
Stories of Narcissus, Myosotis, etc. Gifts. Ned's Valentine.	The Flowerseller. The Greengrocer. The Postman. The Post Office.		The Trades Game (greengrocer). The Postman Game (Keatley Moore).
Nero at the Bakery. Daily Bread. Story of Mondamin (Hiawatha). How Joe earned a Shilling.	The Baker. Bread. Wheat.	*Drawing.*—Box for bootblack or for carpenter's tools; baker's cart; pair of scales; paper boy's bag; yoke for milkman; various brushes used by crossing sweeper, bootblack and chimney sweep; table, chair, easel, etc., made by carpenter; pillar box; boot and shoe; horse shoe; anvil; cobbler's last; pan for leather.	The Gleaner Game. The Trades Game (baker).
The Brownies. A Wise Old Horse. The Story of Pegasus. Bob, the Fireman's Dog.	An Errand Boy. The Carpenter. The Shoemaker. The Blacksmith. Horses. The Fire Brigade.	*Stick Laying.*—A ladder; gate, seat, pond, paths, trees, etc., in the park.	The Carpenter Game The Cobbler ,, The Blacksmith ,, (Eleanor Smith).
The Garden of Paradise. The Story of Iris (Rainbow Bridge). The Origin of the Ganges. How to Obey.	A Public Park. A Bridge. A River.	*Building.*—Houses, streets, chimneys; summer house; gate in the park; tower; bridge. *Paper Folding.*—Baker's cap; garden seat; sunshade; boats to sail in the park; letter and envelope; cowshed; tool shed.	The Fire Brigade *Recit.* The Park ,, A Bridge ,, A River ,, (Veronica Vassey).
Jungle Book and Just So Stories.	A Railway Train. A Railway Station. The Zoo.	*Paper Cutting.*—A ship; railway milk-can; station bell, guard's flag, signal; cottage loaf and windmill.	The Railway Game. Our Menagerie—*Game.*

PAGES FROM MY TEACHERS' NOTE BOOKS

Scheme of Work for Week ending October 7, 1904

STANDARD I

Central Idea	How plants scatter their seeds.
Story	"The Wonderful Plant."
Nature Lessons	1. Plants, the seeds of which are scattered by animals —apple, pear, plum, cherry, hips and haws, blackberries. 2. Seeds carried by the wind—elm, ash, sycamore, dandelion.
Songs	"The Autumn Wind," "Autumn."
Recitation	"How the Leaves Came Down."
Drawing	Apple and leaves. Sycamore leaf and fruit.
Brushwork	Ash leaf and fruit.
Modelling	Fruits of sycamore, ash, hips, plum, etc.,—each child copying from the object.
Paper Cutting	Pear.
Composition and Reading	Horses, pigs, and other animals like apples and pears. They eat the juicy part, but drop the seeds on the ground. Birds peck the plums, cherries, hips, haws, and blackberries, and set their seeds free. Some seed-boxes are very light. The wind helps these, carrying them away to places where they can grow. Sycamore, ash, and elm seeds are carried by the wind.

For Illustration see page (24).

Scheme for Week ending July 21, 1904

CLASS I, Aged 6 to 7

Central Idea	The sea-shore.
Story	From *Water Babies*.
Games	"See how the Waves are dancing" (*Keatley Moore*).
Songs and Recitation	"The Sunbeam Sea" (*Mrs. Chant*). "In the Golden Summertime."
Clay Modelling	Sea anemone on a boulder.
Brushwork	A sea picture. Free designing.
Paper Cutting	A ship.
Drawing	Sea anemone with tentacles outspread.
Sand Modelling	A bit of coast.
Reading	In connection with children's visit to the beach. Suitable pieces from readers.
Writing	Suitable sentences given by children in this connection.
Number	Analysis of numbers to 30. Money sums to *two shillings*, with special attention to half-pence.

For Illustration see page (54).

Scheme of Work for Week ending March 24, 1905

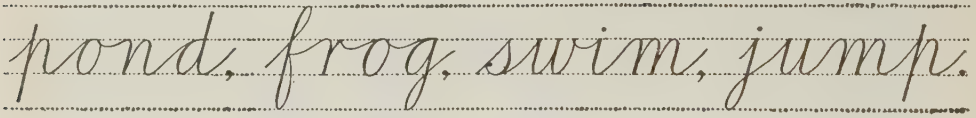
CLASS II. Aged 5–6

Central Idea	Frogs.
Story	"The Frog Prince."
Nature Lessons	The development and life of the frog.
Song	"Spring returns to earth once more."
Game	"Down in the pleasant water clear."
Recitation	"Twenty Froggies went to School."
Varied Occupations—	
Free Drawing	Frog, tadpole, bulrushes.
Brushwork	Bulrushes, rushes.
Clay Modelling	Leaf (of water lily), bulrushes.
Paper Folding	A boat.

B.B. Reading—

The frog is not very big. It lives in the pond and on land. It can swim and hop well. It has dark spots on its back. If we go to the big pond we may see the frogs.

Writing—



For Illustration see page (72).

Scheme of Work for Week ending March 3rd, 1905

CLASS III. Aged 4–5

Central Idea	Germination.
Nature Lessons	Germination of pea, bean, wheat, maize.
Story	"The Pea-blossom."
Game	"How the Corn grew."
Free Drawing	Pea and bean with rootlets.
Clay Modelling	Three stages of germinating pea.
Colouring	Bean with rootlet and leaves.
Stick Laying	*Game* :—"Round our house a garden lies!"
Gift I	*Game* :—"Here's the steady pendulum!"
Gift II	*Game* :—"Go, hammer, go!"
Gift IV	*Game* :—"Here is the farm-house door!"
Number	Analysis of 6.
Sounds	nod, rod, pod; sock, rock, lock.
Writing	

For Illutsration see page (88).

PRACTICAL NATURE STUDY.

Scheme for June 12

CLASS IV. Aged 3-4 years. BABIES

CENTRAL IDEA	Bees.
STORY	"Buzz and Hum."
GAME	"The Child and the Bee."
NATURE LESSONS	(1) The home and different kinds of bees. (2) Life and habits of bees.
NATURE WORK	The care of different plants in the classroom.
EXPRESSION LESSONS—	
Drawing	Bees, a hive on a bench, a pot of honey.
Sand, Paper, B. Boards	Free illustration of story.
Colouring	Bees and hives.
Stick Laying	Hive, garden path, gate, wall.
Clay Modelling	Hive, garden bench.
Building	Garden path, hive, bench.
Gift III and IV	The cupboard where the pots of honey are kept.
Building Game	"My house of bricks."
FINGER PLAY	"Here is a bee-hive" (*Finger Plays*).
PAPER FOLDING	Garden bench.
SOUND LESSON	b, revise d, t, i, o, a, p, etc.
Writing	b.
FAIRY TALE	"I wonder" (*Child Life*).

(*For Illustration see page* 104).

CHAPTER IV

GEOGRAPHY AND NATURE STUDY

A VERY interesting scheme for Standards I and II can be drawn up with geography for its basis.

Supposing your children have gone right up through the school, they will have taken Nature lessons in connection with the seasons for two, three or even four years. Inexhaustible as those lessons are, it may be thought advisable to adopt a rather different scheme for Standard I. As geography is a new subject, it is well to make it the basis of the work.

Many excellent books are published on this subject, and I have found upper standard reading books very useful. They often give the information in a thoroughly interesting and practical way, and many valuable hints may be obtained from them.

Sand modelling, both for teacher and children, is almost a necessity for the intelligent teaching of this subject. By its aid the children's notions become clear and definite, and there are few lessons that give them more pleasure. Coarse seaside sand is the best, not the fine white sand used for the babies' sand writing. The former is far less expensive and much more suited to the purpose, being close and damp, and therefore much more easily modelled. A different kind of tray too is necessary—one with deep sides so that the sand does not get spilt. No tools are needed—the modelling is entirely done by the hands.

There are a few things that help to make this occupation most realistic. Powdered white chalk will make a most effective snow-clad mountain ; blue chalk powdered very finely is excellent for marking the course of a river. These need only be used by the teacher, if a sufficient quantity cannot be provided. Blue paper can be laid on the tray if a bit of coast is to be modelled. Old sugar bags from the grocer's will do beautifully, and the children will be delighted to contribute their own share to the lesson in the shape of "sea." This paper can also be used to mark lakes. Such stage properties as small pieces of rock, smooth pebbles, shells and seaweeds, paper boats and ships folded in a lower class, all help to add vividness to the picture.

Coloured paper flags can also be made in the lower division of the school,

with the aid of stick-laying sticks and gummed paper. These can mark the various features on the map. In connection with this subject, a drawing and cutting lesson on a lighthouse will provide a whole set of these buildings with which to complete your rocky coast or island. Thin cardboard is the best material to use, as it will last longer, and will stand up quite well, if pushed a little way into the sand.

In connection with these lessons on geographical terms, the exploration of the neighbourhood is the groundwork of everything. "Charity begins at home," they tell us. So does geography.

"Every man's chimney is his golden milestone," says Longfellow. That is true, and in the child's case it is the milestone from which all his measurements are taken. The geography of the neighbourhood in an ever-increasing circle must be his starting-point—from the school itself, with its entrances, hall and classrooms, on to the playground, thence to the country beyond. The child's classroom is the place from which he starts on his tour of geographical discovery. Its length, breadth, height—all measured by himself or his classmates and drawn by him to scale on his paper—these form his first memoranda. And until he understands in this way the meaning of a plan, by making one of a place he actually knows, he can never be expected to have the most elementary notion of the meaning of a map. Then the school buildings—measured and drawn in the same way—each step being actually done by the children themselves before anything is put on paper, before any definitions are attempted. And one word as to the much-abused definition. Do relegate it to its proper place, and that is—the *end* of a lesson. Let it be formulated by the children themselves and be the outcome of their own experience. If your lesson has been clear, and given in an interesting, intelligent way, there will be no difficulty in getting definitions.

Now as to the geography of the immediate neighbourhood. If you happen to be so fortunate as to live in a mountainous district near the sea, lessons on geographical terms will present no difficulty. Mountain, valley, river, lake, cape, bay—all can be exactly illustrated from the child's environment. But this is the exceptional case and not the normal, and it is the latter with which we have to deal.

But although only a few of us are provided with such rich material close at hand, let us not think that our own neighbourhood is devoid of apt illustration. The gutter of a steep street on a rainy day is an excellent illustration of the mountain stream from which the river grows. Its tumultuous, headlong race, as it dashes down the slope; the way in which it carries all light material down with it; its conduct when it meets a large stone or similar object in its course—all are truly illustrative of the characteristics of a river. And for further illustration there are few districts in "Merrie England"

that cannot boast a stream of some sort. An excursion to a piece of rising ground near, noting exactly the difference between the view from the bottom and that from the top, will form the starting-point for lessons on the horizon, hills, mountains, valleys, and plains. Lessons on the points of the compass should first be taken out of doors, where the children can make their own personal observations. In these outdoor lessons it is a good plan to provide the children with paper and pencil so that they can make rough sketches. No doubt these will be very crude, but the making of them will be invaluable in impressing the main facts upon the children's minds. We all know that the child often forgets what he sees, still more often what he hears, but rarely what he makes. The very co-operation of the muscles in reproducing on paper his ideas of what he sees will doubly ensure his being able to remember those ideas. Our children have made at one time and another very creditable seaside sketches. Certainly there was some disproportion between the size of the islands and the ships sailing past them. The room taken up by the captain's telescope and the man at the wheel might slightly inconvenience any passengers on deck; the lighthouses bore a strong resemblance to the famous tower of Pisa; and the fish were first cousins to the whale of Jonah's acquaintance. But *que voulez-vous?* The pictures represented truly to them what they had seen, and that is of even more importance than an accurate sense of perspective and proportion.

As I have mentioned before, these walks may well be combined with Nature study.

The correlated scheme is one I have found very useful, and I can imagine that it might be taken with even more pleasure and profit with Standard Ii children. It is advisable to go very slowly over the first section of the geography. Most children find it very difficult to really understand a plan, and it is only when they begin to make plans for themselves that you discover their erroneous ideas. Among some of the first plans of the school buildings made by the children themselves this year we found, among other curious things, chimney-pots drawn, as far as the paper would permit, to their full height. By means of this free work we were enabled to correct many false ideas, which would not have shown up otherwise.

Pictures play a very important part in these lessons, especially pictures illustrating foreign lands. Excellent illustrations sometimes come out in magazines, many are found in reading books, while coloured picture post-cards form a very valuable aid. These should, of course, be in addition to the ordinary geographical pictures, brought out by the various educational publishers, many of which are most artistic and true to life. Verbal description, however graphic and realistic, can never hope to give such a vivid and complete idea of a scene as pictorial representation. The memory of the

DRAWING FROM NATURE.

picture will remain in the child's mind long after your words have faded from his imagination. And in this class, with these young children, it is not so much actual, producible knowledge that we want to give. We want to awaken their interest, to arouse their curiosity, so that they may have a keen desire to know more about their own land and other countries. That is why the syllabus is so wide. To give the children just that glimpse of the world, and its many and various inhabitants, that shall be the whetstone to their interest and make them eager and curious to continue the study—that is the most that one can attempt to do in Standard I, and in doing it effectively a great deal has been accomplished.

Notes on Correlated Scheme based on Geography

For the actual working of this Scheme, the school year should be divided into three periods to correspond with the three sections—

Period I.—September 1	to December 31 . . .	Section I.
„ II.—January 1	„ March 31 . . .	„ II.
„ III.—April 1	„ July 31 . . .	„ III.

The first and third periods consist of four months, the second of only three. The first part of the work should be taken very slowly, thoroughly and carefully, if the rest is to be really understood, and there are many lessons in the first section which will need to be taken in sub-divisions.

Section I.—At the rate of one half-hour geography lesson a week, the first four lessons will take from six to eight weeks. The plans of classroom and school will take some time, as measurements have to be made for each line, and it is well to have plenty of plans of variously-shaped objects made before attempting the plan of a room. The next two lessons present little difficulty. Both should be taken out of doors, and lines should be painted on the playground to show the points of the compass. Children should be encouraged to make their own personal observations with regard to the movements of the sun.

"Making a map" is more complicated. A walk should be taken for this purpose. The direction and curves of the road, and the streets opening out from it, should be carefully noticed.

Next morning the children can attempt their maps; first, on rough scraps of paper, to see how much they have understood and remembered; then with the help of the teacher, after marking the points of the compass on their papers. The teacher should make a large copy of this, their first map, and every subsequent one.

Maps should be made of various parts of the immediate neighbourhood, each one being taken in this way. The children's feet should actually traverse the road which they afterwards draw. When several of these maps have been made on paper and in sand, the children will be ready for the introduction of a wall map.

The stories I have suggested are only a few of the ones that might be taken in this connection. Nature myths are always very interesting to children, and the stories of Phaeton (son of Phœbus), Hermes or Mercury (god of wind) and Iris (the rainbow goddess) are especially good. Another Greek story in connection with the points of the compass is that of Arcas and Callisto, or the story of the "Great and Little Bear" (*cont.* on p. 72).

Correlated Scheme based on Geography

Geography	Nature and Object Lessons	Suggestions
SECTION I. *Geography of the Immediate Neighbourhood.* 1. A picture and a plan. 2. Making plans of objects. 3. A plan of our classroom. 4. A plan of our school. 5. The points of the compass. 6. What we can see from the playground. 7. Making a map. 8. The mariner's compass. 9. The weather vane.	A yard measure. Estimating length, height, width. The air we breathe. The work of the sun. The work of the rain. The work of the wind. Nature lessons on any specimens collected during geographical excursions, e.g. flowers, seaweed, shells, etc.	*Stories.*—Greek Stories of Phaeton, Hermes, Iris (*Nature Myths*). *Songs.*—The Sun's Travels (R. L. Stevenson); The Raindrops (Keatley Moore); Oh ! how the wind is blowing (Keatley Moore). *Drawing.*—A foot rule ; various simple objects drawn to scale ; a mariner's compass ; a weather vane. *Brushwork.*—Various flowers, leaves, twigs, shells, etc., collected during the walks. *Drawing and Paper Cutting.*—A weather cock ; a windmill ; an umbrella. *Clay Modelling.*—An umbrella stand ; specimens collected during walks. *Sand Modelling.*—Plans and maps drawn in sand.
SECTION II. *General Geography.* Lessons in connection with maps, introducing the following terms :— Land and sea, coastline. Cape and bay. Island and peninsula. Mountains and hills. Rivers and lakes. Valleys and plains.	The three states of water. The giant steam. Snow and ice. Rocks and their story. Climate and its causes. The work of fire—hot springs and volcanoes. The insect life of a river. The animal life of a river. Water plants.	*Stories.*—The stories of Stephenson and James Watt, Captain Cook, Cabot, etc. ; Kingsley's *Water Babies.* *Songs.*—Dark brown is the River (by R. L. Stevenson) ; Looking Glass River (by R. L. Stevenson) ; Clouds and Rain (by Keatley Moore) ; Wind Song (by Eleanor Smith). *Sand Modelling.*—To illustrate the various geographical terms—cape, bay, island, lake, etc. *Clay Modelling.*—A boat ; a ship ; a kettle ; a teapot. *Drawing and Paper Cutting.*—A steam engine ; a lighthouse. *Brushwork.*—A sea picture ; a river picture ; illustrations of the insect, animal and plant life of a river ; various kinds of shells.

Correlated Scheme based on Geography (*continued*)

Geography	Nature and Object Lessons	Suggestions
SECTION III. *The World and its People.* The country in which we live. The coalfields. The Black Country. The Potteries. Lands across the sea. A trip to India. China and Japan. The cotton country. The gold fields. Winter in Canada. Lapland and the Laplanders.	The story of coal, glass, china, etc., and other British products and manufactures. British birds and animals. Wonders of the sea shore. Wonders of the sea. The diver and his work. The lifeboat. The lighthouse and its keeper. Life on an ocean-bound steamer. The rice-fields of India. A sugar plantation. The story of a cotton pinafore. Lumbering in Canada. Tropical forests and birds. The jungle and its inhabitants. Icebergs and glaciers. The polar bear. The seal. The whale. The reindeer.	*Stories.*—The Story of the Eddystone Lighthouse; Grace Darling; Stories from the *Jungle Books* (by Rudyard Kipling); Stories from the *Just So Stories* (by Rudyard Kipling); Story of Hiawatha (by Longfellow); Androcles and the Lion. *Songs.*—Foreign Lands (by R. L. Stevenson); My Bed is like a Little Boat (by R. L. Stevenson); The Sea Shell's Song (by Mrs. Ormiston Chant); The Sleigh Song (by Mrs. Ormiston Chant). *Brushwork.*—The cotton plant; the sugar cane; a starfish; an anemone (sea); illustrations in connection with birds and nests. *Clay Modelling.*—Specimens of articles made of china and glass—cup and saucer, jug, tumbler, etc.; oyster shell and pearl; Davy lamp; pickaxe. *Drawing.*—Various kinds of fish; section of colliery, showing shaft, cage, etc.; coal hammer; Laplander's canoe, hut and sledge; Indian's wigwam; a sugar cane.

The songs, "The Raindrops," and "Oh, how the wind is blowing," can both be played as games by the children. I have seen games, so-called, on the solar system and similar subjects, but they savour too much of the sugar-coated pill, with too much pill and not enough sugar. In fact, they are too obviously instructive to be foisted on children as games.

The occupations present no difficulty. The excursions will usually provide something for brushwork, especially if you suggest beforehand, something to look for, so that you do not get simply a quantity of miscellaneous nondescript specimens.

SECTION II.—I have only allotted three months to this section, as it is not nearly as wide as the others. It embraces the ordinary terms used in the description of a map, and though it does not sound very prepossessing, yet the lessons can be made quite as interesting as those in the other sections.

Here especially good pictures are essential, and one often comes across some in monthly magazines. It is a good plan to keep a sheet of cardboard, or a brown paper dado, on which to paste these pictures as they come to hand. Picture postcards are very useful here, especially coloured photographs. These can be handed round and afterwards mounted.

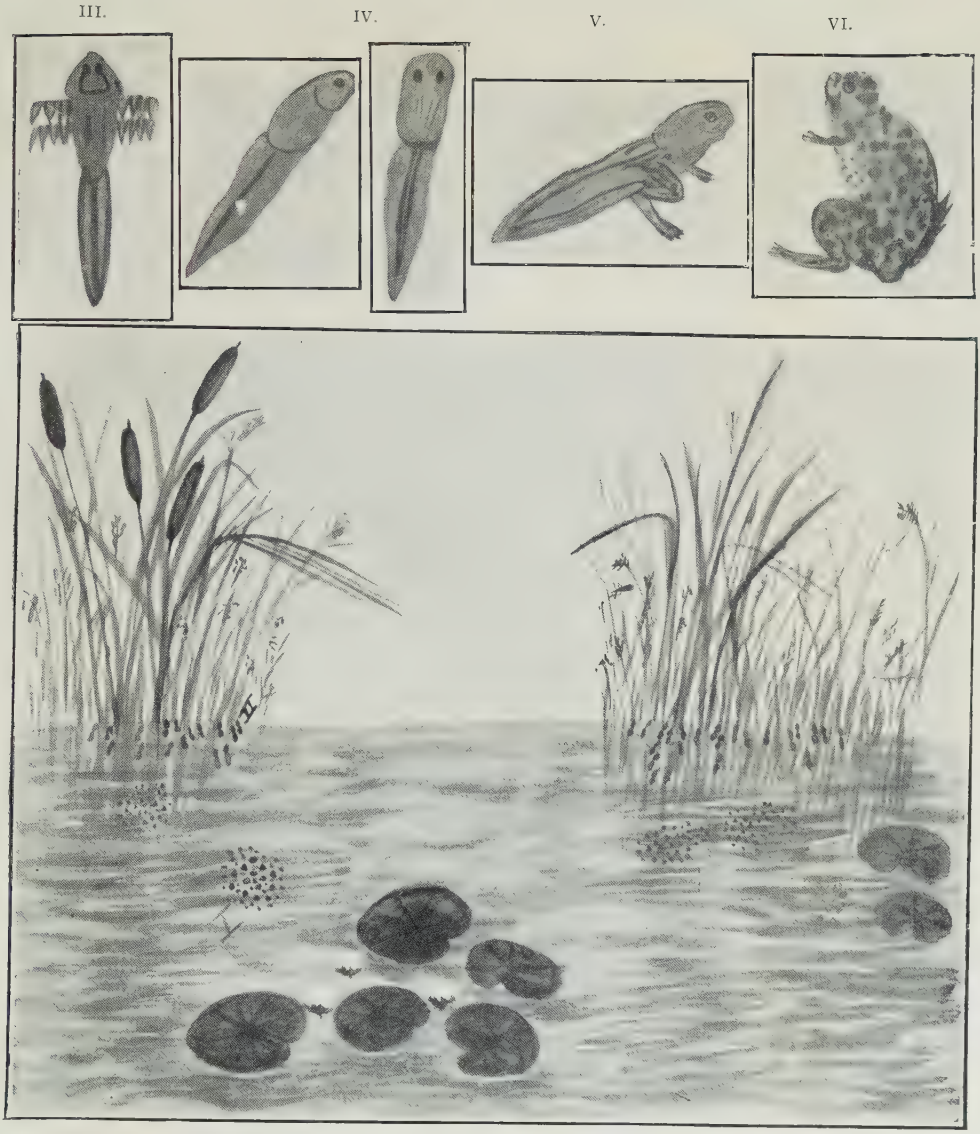
There is one subject given among the Nature and object lessons which may seem one of extreme difficulty to children in Standard I. That is, the one on climate. I admit it does sound rather formidable, but, nevertheless, it makes an exceedingly interesting lesson, if taken simply and intelligently. Children know that there are hot and cold countries, and it is only necessary to ask them, "Why do you think some countries are hot and some cold?" to see that they are quite prepared to be interested in the question. The points I have taken are the nearness to the sun, or distance from it, the influence of mountains and prevailing winds, proximity to the sea, etc., and I have always found the children not only keenly interested in it, but able to understand it in an elementary way.

The stories suggested are stories of discovery. These will pave the way to the next section. Ruskin's "King of the Golden River" might be taken, and the Greek story of "Scylla and Glaucus," or, if preferred, *Water Babies* might be taken as a continuous tale.

As many excursions as possible should be made, to neighbouring coast, river, hill or lake, so that the children may get as much first-hand knowledge as possible. The features that *cannot* be illustrated at home must be made real by means of pictures and realistic sand models. The sand models used for this purpose should be made by the teacher, before the lesson, on a large tray, and should be as realistic as possible. Proportion should be carefully studied, so that a correct impression may be given. Relief maps are excellent in this connection, but I am thinking chiefly of home-made illustrations. Plasticine and ordinary modelling clay are also very useful, better than sand for keeping, as clay-made models retain their shape and last for some time, while sand models can only serve temporarily.

SECTION III.—We have kept the best till last. Section III is a delight to the children. They love to hear of foreign lands and to see pictures of them.

In putting down the headings under geography, I have only mentioned a few of the subjects that may be taken. Some of them are predetermined for you by the district in which you live, and there are many other countries to visit besides the few I have suggested. If you have friends and relations in foreign lands, you will be able to get many good postcards to show in your lessons. If your school is in a manufacturing town you will naturally take the products of the factories into your scheme. Good roller pictures can be obtained to illustrate nearly all the nature and object lessons. Models of the lifeboat and lighthouse can be supplied, so that this section of the work can be amply illustrated.



TEACHER'S ILLUSTRATIONS FOR SCHEMES (see p. 64).

The stories that may be taken are very numerous. Those told by Rudyard Kipling are admirable if *told* to the children. They cannot very well be read to them at this age. Children simply revel in *The Jungle Book* and *Just So Stories*. Stories of adventure in foreign lands may be found by the dozen in any magazine for boys, and if carefully selected will be found of use in stimulating imagination, and interest, in the countries across the sea, where perhaps some of these very children will be the colonists of the future.

I have not mentioned recitations in this scheme. Children of seven and eight are too young to catch the spirit of patriotic recitations, of which there are many, but such short poems as Robert Louis Stevenson's might be learned with advantage to say, as well as to sing. "My Shadow" and "Foreign Lands" are great favourites. Other poems which might be learned are—"Which way does the wind come?" (by Wordsworth), "What the windmill says" (by Longfellow), "The Sea Fairies" (by Tennyson), "The Brook" (by Tennyson), "The Children's Voyage" (by C. L. Thomson), "The Train" (by C. L. Thomson), "Pretending" (by L. Thomson), "The Wind" (by L. Thomson).

For older children I cannot imagine a better poem of its sort or one more inspiring, than "England, my England," by W. E. Henley. It breathes the spirit of devoted patriotism. And if our children are to be the colonists of the future, it is surely our duty and pleasure to do all in our power to make them proud of their own land. Then, when in years to come they work out their destinies in foreign countries, they will be worthy citizens, wheresoever they happen to be, with hearts that will ever beat true to

"England, my England."

CHAPTER V

ELEMENTARY SUBJECTS: (1) READING; (2) WRITING; (3) ARITHMETIC

Reading.—I suppose that all teachers in infant schools of to-day will be agreed upon the fact that the best way of teaching reading is by a phonic method. We have learned—late enough in the day—the great importance of sound as a teaching factor. In the alphabetic method, the sound of the names of the letters was divorced from, and wholly opposed to, the sound of the whole word. But in teaching on phonic methods you use sound as your great auxiliary.

We base our teaching upon Miss Nellie Dale's method, and all her reading books are used in the various classes, as you will see by referring to the syllabus. Miss Dale's *Handbooks on the Teaching of English Reading* contain teaching notes and a running commentary on all the little readers, which are charmingly illustrated by Mr. Walter Crane. I find that reading taught on this method is one of the most interesting lessons of the day, even in the lower classes, where it is apt to be one of the most disliked and tedious subjects.

It would take up far too much room were I to attempt to fully describe the method of teaching reading. For that I must refer you to Miss Dale's handbooks, but I will just briefly touch upon some of the main points.

In the first stages, the classes of sounds are differentiated by means of various colours, red being used for vowels, blue for unvoiced consonants, black for voiced consonants, and brown for silent letters.

The children learn the reason for the sounds being dressed in different colours, and should be able, upon the introduction of a new sound to be able to classify it after experiment. By degrees they are divorced from the colour scheme, and they have only black upon white, or white upon black.

Besides the reading books and handbooks there is a tabulating frame, and box of letters with eyelet holes. These are to hang in their recognized places, or "houses," marked in the frame by means of little hooks. The frame should be introduced to the children, void of tenants, and as each

sound is learned, it should be put into its own "house." The frame and blackboard form the first apparatus used. Then there are little books in which to print the sounds and words. Each page ruled for printing is accompanied by a page left blank for the children's own illustrations. Red, blue, black and brown pencils are used, so that every sound shall be dressed in its own peculiar colour. The children enjoy this part of the work very much, and very comical are some of the original illustrations.

Children learn to read very quickly by this method. The books are carefully drawn up so as to exclude any words that are not regular in their formation. The long vowel sounds are not introduced until the children are very familiar with the short ones. By the time this set of reading books has been gone through, the children will not find much difficulty with an ordinary reading book, especially if they have been gradually taught a few common exceptions by means of blackboard Nature reading lessons. I always find that the children who read well and fluently from these purely phonic books very quickly get accustomed to the exceptions, and after a few pages have been read in the new book, they read almost as well as under the simpler system. The transition is not nearly as difficult as one would imagine, if the previous teaching has been thorough and intelligent, and the children have been taught how to grapple with a new word.

THIRD CLASS. — We take no sounds with the babies. This subject does not commence until the children are four years of age, and then they begin with the blackboard and the tabulating frame. Once they become acquainted with the sounds, it is quite simple for the children to do nearly all the blackboard work themselves, both in printing and illustrating. They also make their sounds and corresponding pictures on brown paper with chalk, and on plain foolscap paper with crayons.

It is not necessary to teach all the sounds before proceeding to words, but the sounds must be taught in a recognized logical order. That is a most important point. Many little words can be made once the children have mastered p, b, t, d, c and a.

In the lower classes the reading lesson is introduced by means of a little story, which contains the words about to be learned. By this means the interest of the children is at once aroused and the lesson proceeds pleasantly. If the words chosen permit of illustration by action, various children are chosen to perform the movements necessary. Such words as pat, sat, bit, cut, nod, and many others can be illustrated in this way. It is well to let as many children as possible take an active part in the reading lesson. For instance, one child can sound the word very loudly and deliberately before the class; another child can print the word, and another can illustrate it on the blackboard, while a fourth might act it, and a fifth give a little sentence containing

it. Children are always interested in watching each other do such things, and in this way their attention is very effectively secured. In something after the same manner a little game may be played. One child comes before the class, and performs any action he chooses, after the manner of dumb charades. The rest of the class guess the word he is acting, and the one who can print it correctly takes the place of actor.

Perhaps *the* most important thing to be attended to as much with the younger children as the older ones, and more than all with the teacher, is the actual vocal production. Voice production is a much neglected study, but it is essential to correct enunciation.

It is not a thing that comes by instinct, to the majority of people at all events. It must be acquired by careful practice. Slovenly pronunciation must be avoided above all things, or the reading will be spoilt. This must be insisted upon. The teacher must practise the production of each sound until she has it perfect. The great faults lie, as a rule, in provincialisms, which affect the vowels principally, and in the prolongation of the consonantal sounds beyond the necessary limit. Thus in London and the district the long sound of a becomes ī, as in such words as pail, rate, etc. Round about Leeds the long sound of o becomes ow, as in the word over. Many other provincialisms will at once suggest themselves, but these are sufficient to illustrate the point.

The consonantal faults arise chiefly from want of precision and carefulness on the part of the individual, and reading lessons which would otherwise be good are over and over again spoilt by the slovenly pronunciation of the teacher, and the proportionately increased slovenliness on the part of the class. Children who speak thickly and indistinctly, children who habitually sound f for th and th for s, if taken individually and shown how to produce the sound, are found in 90 per cent. of cases to be suffering from nothing but chronic laziness of the speech organs. Such children should *never* be allowed to pronounce a word incorrectly, or the habit will become ineradicable.

Consonants should be pronounced quickly as a rule. Such sounds as p, b, t, d, g, c, j, r deteriorate into mixed sounds instead of pure ones, if I may so put it, when they are prolonged beyond the time necessary to produce them. They acquire a kind of vowel sound in addition to their own peculiar one, which is exactly opposed to the correct use of a phonic system. So that this is a point that needs the greatest, most vigilant attention right through the school, or the pure tone that should be acquired in reading will be vitiated.

Second Class.—The children in this class proceed in exactly the same way as already sketched, for the first six months of the year, with an occasional use of the first book, *Steps to Reading*, which consists entirely of pictures and words in the colour scheme. They choose a picture, and then after a

conversation about it, carried on almost entirely by the children themselves, they find out the words that illustrate the various objects. In another lesson they may print those words in their printing books, and make some original illustrations. Sometimes a story is woven round the picture chosen, and told in very carefully selected words on the blackboard.

When the children seem ready for it they are introduced to *Primer I.* This may be at the end of six months, and it may not be till about nine or ten months of the year are gone, but the date of its production depends entirely upon the children themselves. Sometimes one has a brighter set than at other times, and one's work has to be regulated accordingly. The reading book is used very sparingly, so that there cannot possibly be any memorizing, and every new word is discovered by the children. The same words are used over again in various combinations on the blackboard. These form, so to speak, the *entrées*, and *rechauffé* dishes, for they consist of the same material dished up in another way, so that the children become familiar with the words themselves without committing the context to memory. Memorizing is avoided in the same way in every class. Plenty of varied reading material is put before the children, so that they have no chance to learn the order in which the words occur.

First Class.—Here the syllabus consists of *Primer II*, the *Infant Reader*, and sometimes other books as well. This year we are going to introduce Miss Dale's latest book. The *Dale Reader No. I* is the book we are just going to start with our class of sixes, at the end of the seventh month of our school year. It is a somewhat difficult book especially for children in elementary schools, who do not include the delightful situations recorded among their experiences, and whose conditions of life differ so widely from those of the fortunate Lily, Betty, Philip, Dan and other young people whose adventures are so charmingly related. But our children have enjoyed the previous readers, and I hope they will prove just as successful with this latest book. If not, we shall drop it for a time.

In this class Nature reading lessons are started. They are given occasionally at the beginning of the year, and frequently towards the close, and are connected with the subject chosen for the week's work. In this way exceptional words are introduced, and by the word exceptional I mean here those that do not conform to ordinary phonic rules. These words are used very sparingly and chosen very carefully. Notes are made on each word so introduced, so that the teacher knows exactly where the children are. This system of incorporating exceptions prepares the class for an ordinary Standard I reader.

Standard I.—Nature reading lessons are continued in Standard I. In both these classes the children suggest the sentences, and the teacher or

other children correct or amend them as necessary. This is a great help to composition and grammar in the upper school. Standard I children often print this reading matter in their nature study notebooks, which have ruled pages on one side and brown paper on the other. Then illustrations for the reading are made during an occupation lesson. This printing is done during the afternoon reading lessons, as it is comparatively light work.

Ordinary Standard I readers are used in this class, sometimes two sets and sometimes three, beside several sets of little story readers, which are much enjoyed. I have a whole set of fairy tale books, Stead's *Books for the Bairns*, and if the children happen to be particularly good readers, they are allowed to have these before the end of the year.

Expressive reading is expected from the first. The children are taught to look upon all the pages in their reading books as stories. Even in the lower classes it is a " story," not a sentence, that is printed on the board, and must be read as such. By this means that monotonous, jerky style of reading which is often heard in a class of little children is avoided.

Oral composition is always used in connection with word-building. Every word built up on the blackboard is illustrated by means of " stories " given by the children, so that the words introduced have a real meaning for them.

Lately we have acquired a number of small cardboard boxes, enough for the classes of fours and fives. In each of these the teacher has put pieces of red, white and blue chalk, together with a tiny blackboard rubber. In the morning these boxes may be put out on the desks, so as to be handy at any time not only for printing and illustrating words on the little blackboards, but also for making number pictures, illustrations for story, etc. By this means a good deal of time and trouble is saved.

Last year we used a very interesting set of books with Standard I. These contained brown paper pages alternating with foolscap ruled with a single line. After a Nature lesson the children draw their specimen in these books in the natural colours with chalk. This was followed some time during the week by a composition lesson, when the children composed and printed a reading lesson to correspond on the opposite page. We adopted these during the spring term, and in a few weeks their books were gay with pictures of snowdrops, daffodils, primroses, tulips, violets and other flowers of the spring.

One year we made our own Nature readers. Every child in Standard I had a folding cardboard cover with an elastic band. Each week a Nature reading lesson was taken on the blackboard. This was printed off on the A B C copier, and a copy given to each child. Thus a reading book was gradually built up, each sheet being kept in place by means of the elastic band. At the end of the year the children were allowed to take them home. It will be seen at once that these little books were very valuable, containing

as they did the children's own compositions. All the sentences were suggested by individual children after the Nature lesson.

The Teaching of Writing.—I shall not say much about the teaching of writing, for, as a rule, I believe it to be better taught than most school subjects.

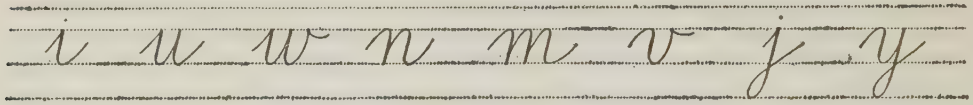
Our children do not start to write until they are in Class III, and then only during the last six months of the year. This makes them about four and a half years of age when they start. Previous to this they have had drawing on various surfaces; in sand with pointers, on brown paper and blackboards with chalk, and on plain paper with crayons, but no writing, and for this reason—long lines are much easier and more natural to the child than short ones, and it is extremely difficult for a child of four to make letters in lines. The muscles of the fingers are not sufficiently developed to enable him to do fine work. Therefore it is best to encourage the development of the larger groups of muscles first and give them plenty of exercise; then he will be all the better fitted to grapple with the difficulties of writing when the time for its introduction arrives. Another reason for postponing writing is the danger to the child's eyesight. Acquired blindness takes place in the majority of cases between the ages of three and five, and this because it is the critical period in the development of the eye. Full development does not take place before the child is eleven years of age, and during the whole of school life the eye should be carefully preserved from any danger of strain. It is the continued fixation of sight upon near and small objects, especially when combined with imperfect illumination, that creates and fosters myopia. This is one reason why writing lessons with young children should be short.

When starting to teach writing, the *greatest* care should be taken that a correct position is adopted by every child. If only this is done from the first an enormous battle is gained. Go into any classroom unaware to the children and note their positions when writing. There they sit, or sprawl only too often, with head bent forward, body twisted round, legs bent under them, in the most unhygienic posture they could adopt. And this, if persisted in day after day, year after year, too often means physical deformity, stooping, round shoulders, twisted spines, short sight. Any of these may only too easily result from an incorrect position adopted day after day, when the bones of the child are soft and pliable, and the organ of sight in process of development. It is such a difficult thing to cure, this acquired faulty attitude (for it quickly becomes habit), and such an easy thing to prevent by insisting on the correct position from the first.

Class III.—In Class III the children are not told the names of the letters.

At this stage it would entail terrible confusion in their minds, for they are only just getting used to the sounds of their printed letters. Writing should be just a drawing lesson, under slightly different conditions. It is a mechanical exercise, and as such, forms another reason why writing lessons should be short, for there are few children who will be interested in making with infinite labour, over and over again, a form which conveys no meaning to their minds. But a teacher with a little ingenuity can make even the writing lesson interesting. Thus ∪ becomes a hook on the dresser, and if we make a whole line, we can see how many cups mother will have to buy to fill the shelf. And this ʔ is Bopeep's crook, and we can sing our favourite nursery rhyme. This O is the pond where Tommy went fishing, and thereupon follow the thrilling adventures of the said Tommy. I need not go on. You will doubtless think of many such little artifices, by means of which you can secure the little ones' attention and care.

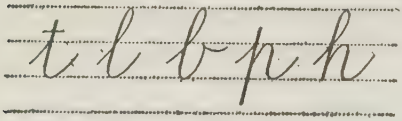
It is best to attempt but few letters in this class.

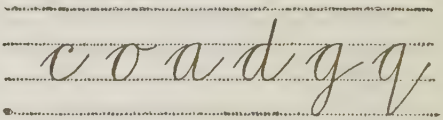


will be quite a sufficient syllabus, as the children only get two writing lessons a week in this class, and that only during the last half of the year.

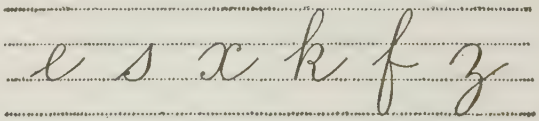
Class II.—The average child in Class II is five years of age. Here a writing lesson of twenty minutes is given four times a week. The remainder of the small letters are learned in the following groups :—

1. Recapitulation of former letters with  added.

2. 

3. 

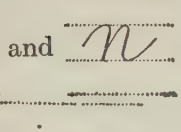
Then the irregular letters :—



It is neither necessary nor advisable for children to learn to form all

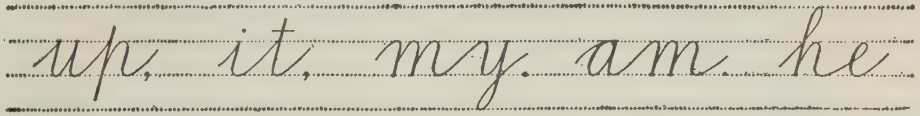
A MODERN INFANTS' SCHOOL.

their small letters before they begin to write little words. Thus when

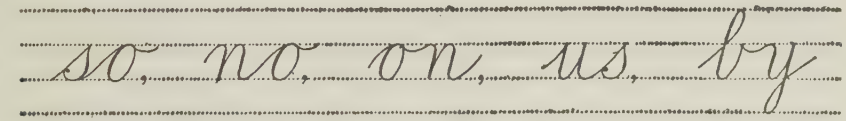


i and *n* have been made, the children can learn to join them—

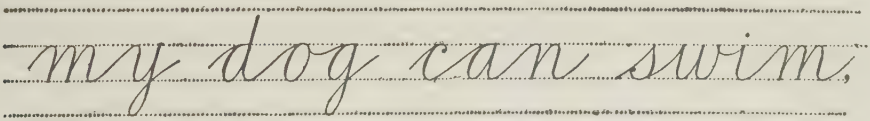
Such words as



do not present great difficulties, with the exception of the double hook without a break in the word "my."



are more difficult, and should be taken later. At the end of the year the children should be able to copy from the blackboard such a sentence as :—



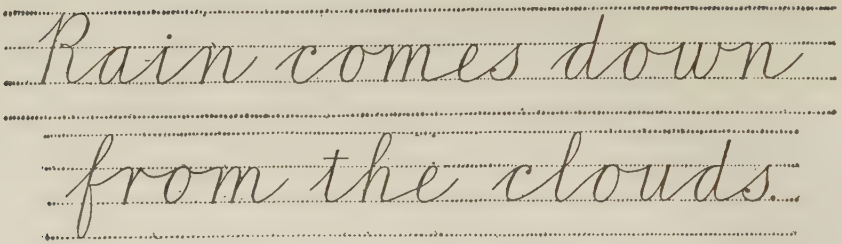
taking one word at a time with the teacher.

Class I.—Here considerable progress is made. If the writing has been carefully taught in the second class, you may reasonably expect these children to write a good round hand by the end of the year. The syllabus of work will be found in Chapter II.

In this class the names of the letters are taught, and the children are expected to write down any of them, capital or small, from dictation by the end of the year.

The words contained in the copy writing should not be more than five or six letters long.

Such a sentence as



would be a very fair test for children in Class I towards the end of the year.

With regard to the slope and general style of the writing, I always find it a good plan to insist upon the placing of book or paper in such a position that the right arm may be straight from the elbow, at right angles to the desk. This means that the book should lie to the right of the child, not as so often happens to the left. The latter position tends to produce a backward slope, which is most undesirable. It is not at all difficult to produce an exceedingly uniform style throughout a class if this position is insisted on in every writing lesson.

STANDARD I.—If the children pass into the Standard class with a thorough knowledge of the written letters, it greatly simplifies matters there, for though the actual writing syllabus is the same in both classes, transcription is taught in addition, and more style and finish are expected. Here, too, pens and ink are introduced for the first time. Two sets of books are used, one for transcription and another for copy-writing. As a rule during the first stage of transition from lead pencils to pens, the style of writing is heart-breaking; the children seem to go back several months. But that is only natural. You find its parallel in the change from drawing with a firm point, the pencil or crayon, to drawing with a flexible point, the brush. For a time the difficulties of writing become almost insurmountable to the children, and not even the novelty of the pen, and the advanced stage which it betokens, can quite atone to them for its amazing capacity for spluttering into blots on every available occasion. But I must say that once the pen is mastered, a blot is a rare event. Indeed, I often marvel at their scarcity, but perhaps it is owing to the fact that we do paper work in every class from the babies upwards. By this means the children learn to be clean and tidy, and this saves their books from that muddled, messy appearance that spoils the look of even the best work.

In a transition class, where there are two divisions, upper and lower, it is quite possible to take dictation of words and sentences, and simple composition with the upper division during the last few months of the year. Some of them will learn to produce quite creditable compositions. At first the spelling is likely to be very erratic, owing to the fact that the children have

been brought up on the phonic system, but they soon improve in this respect. Some people object to teaching reading on a phonic system for this reason, but, speaking from personal experience, I find that with careful teaching the spelling difficulty is soon overcome.

The Teaching of Arithmetic.—Why is it, I wonder, that arithmetic is usually such a bugbear in an infants' school! Many reasons may be given, but one of the strongest is, I am sure, that ordinarily too much is attempted. Children are expected to reason about numbers which are only empty sounds to them, and cannot possibly be mentally realized by them. A number is to little children but as sounding brass and a tinkling cymbal, something to juggle with, absolutely meaningless, unless it is connected with something in their own lives, something that is at least translatable in terms of their own experience. And if you experiment with children, and find out what they really can understand and make their own, I think you will come to the conclusion that the arithmetical capacity of a child under seven years of age is extremely small. Of course he can be taught to juggle with columns of figures, one of which, for some reason or other, is called "units," and the other "tens"; but is this the right kind of arithmetical teaching for him at this age? I think not. Let us see, then, what we can reasonably expect from a child, in this subject, in the various classes of an infants' school.

Babies.—The days are surely happily over when inspectors complained that "the arithmetic of the lower babies is poor"! I should be inclined to apply the adjective to the babies, and not the arithmetic. Fancy expecting "arithmetic" from babies of three!

Their knowledge of numbers from one to four is obtained by means of their various Kindergarten occupation lessons, by vigorous games at ninepins, and by number pictures drawn for them, and sometimes by them, on the blackboard. Permanent number pictures are also made on cartridge paper or tinted cardboard, and fixed to the wall of the classroom.

Bead threading in groups of various numbers and colours is an excellent occupation for helping little ones to realize number values. Suppose they have twelve beads in their trays—four red, four blue, four yellow. While threading them in various combinations they are all unconsciously forming and strengthening ideas of number.

So also with Gift III, which is most useful in Class II for teaching the number eight. In building, the bricks are arranged in ones, twos, threes, and fours. I do not suggest that this arithmetical placing of cubes shall form your Gift III lesson, but, in building life forms, number is bound to be emphasized.

Stick and shell laying, drawing, play with Gift I balls, in fact, almost every

lesson in the baby room can be made to give and strengthen ideas of number without any formal teaching on the subject whatever. In fact, formal numbers lessons do not find a place until the children are in the next class.

Class III.—Here the teaching of number proceeds in the same way, by means of number play and occupation lessons, during the first part of the year. After about three months, definite number lessons are started. Number pictures are made in the same way as in the previous class. Little stories are told introducing number values, and the corresponding pictures are made on the blackboard or the story itself is acted by the children. They like the latter plan very much. Plays with hen and chickens, eggs in a nest, cat and kittens, pigeons and pigeon house, are very simple and effective. For instance, take the last mentioned in teaching number five. Some ten children make a ring for the pigeon house. One child is Mr. Pigeon, another Mrs. Pigeon, and then there are three baby pigeons. You may proceed with your story something as follows: "Father and mother go out to look for food. How many gone out? How many left at home? Mother comes back with food. How many now? When they are fed, they all go out to fly about a little in the sun. Father comes back. How many in the house now? How many gone out? Father goes to look for them, and brings them all safely back." From such an illustration the following facts are learned:—

$$5-2=3$$
$$5-3=2$$
$$3+1=4$$
$$4+1=5$$

We have two boxes of plaster animals, one of sheep and one of dogs. The children always enjoy number lessons with these. With sticks or bricks they make a field on teacher's table and put the sheep in safely. But some one leaves the gate open and some frisky little lambs get out. The children are greatly delighted to hunt them in again. And if you are wise, you will let them do it all. Not only do they love to help, but they will remember very much more accurately than if you do it all for them.

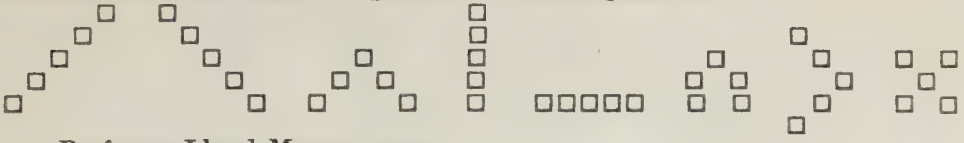
Numerous are the little number plays one can devise for a class. Dolls and dolls' furniture, a tea party set, a Noah's ark, etc., can all be used, and the more variety you can introduce the better.

But these concrete examples do not form the whole of the work. We make a point of ending every number lesson with a few questions, when lambs, dolls, sticks and all other auxiliaries are put away. This accustoms the children to realizing numerical ideas without any direct visual aid from the concrete. All our teaching aids are most valuable, but we do not want to make crutches of them, so that we must not accustom the child always to work from the concrete, lest when that aid is withdrawn, he will be helpless. Teach your

number with apparatus; then test the value of your teaching without. Of course you would not dream of asking a four-year-old what four and two make. You must give him something concrete to think about—ducks, lambs, tops, marbles, or anything else you like. And one who knows anything about the mind of a child will realize that he has made an advance when he can answer such a question without appealing to the testimony of his eyesight, for he has had to bring to his mind's eye an idea of those ducks or marbles before he can answer you.

It is well to use a variety of materials in a number lesson. If you invariably use shells, or sticks, or tablets with the children, they may think of number as applied to those things only; whereas, if all kinds of illustrations are used, they will gradually learn to float off, so to speak, the number value from the objects, and get ideas of four or five.

Again, it is a mistake to arrange a group of objects always in the same way. For instance, if five is always arranged  the children will have a tendency to visualize it so, and not to recognize five in any other position. The objects should be arranged in every possible way, so that it is the *number value* and not the relation of position that is emphasized.



Professor Lloyd Morgan says :—

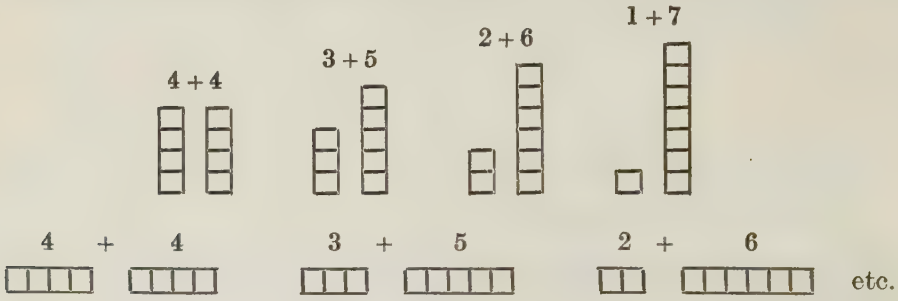
"As a child I associated the number five with the arrangement  , and I remember being puzzled when the same word was applied to a different grouping. Even now, I tend to visualize a group of five objects arranged in this manner."

In this class, the number syllabus does not extend beyond six, and I really think, that that represents to the full, quite as much as one can honestly expect children of four to deal with intelligently.

Class II.—In this class the children are dealing with the number ten at the end of the school year. It may seem very little to you that they only proceed from six to ten in a twelvemonth, but you forget one thing, and it is a most important fact. To you, ten is a number, a symbol. When dealing with it you do not stop to think of visualizing any ten objects, but the children are in the most elementary stage of number, where they must realize the actual concrete value that any number represents before they can deal with it. Just

experiment with yourself. Shut your eyes and picture to yourself nine ducks in a pond, and you will find that it is not very easy to do so. Well! that is the kind of thing the child has to do every time you ask him a question of this sort. I am speaking now of children five years of age, and of the average child. As they get older they learn to deal with numbers more after the manner in which we ourselves deal with them. For this reason you will find that children deal more readily with eight than with seven, and with ten than with nine. This is because the grouping is more simple and regular. So that in taking these numbers I should only treat with seven and nine slightly, just to show their places and come back to seven after eight has been fully dealt with, and nine after ten.

As to the method of teaching, it is the same as in the other two classes. There is no break, no abrupt change, only more purely mental exercises are introduced. Gifts III and IV are excellent to illustrate the number eight, the decomposition can be shown so effectively from the divided cube. The obtaining of two fours should be done in both ways, by splitting the cube first vertically and then horizontally. In showing the component parts of eight, it is best to begin with four and four, arranged first vertically and then horizontally, taking from one four and adding to the other.



But do not always use the building gifts, for the reason before mentioned. Tablets, red one side and white the other, are excellent for this class.

One word as to the use of figures. They should always be used from the first, in connection with the number demonstrated on the blackboard. While one child is arranging the articles on the table, another can be putting out the same number of balls on the ball frame, and another writing the symbol that represents the numerical value of either on the blackboard. In this way, without any dull and dreary repetition of the names of figures, children learn to recognize them almost unconsciously.

Number lessons for children of five and under should never be taken

for more than twenty minutes at a time, as they demand so great a concentration of mind, more so than any other exercise of the brain. And, needless to say, these lessons should always be arranged for during the morning, and if possible after some simple lesson or recreative exercise, so that the mind is fresh and alert. With us, arithmetic comes in most cases at 9.30 or 10 o'clock. For the little ones it does not so much matter, as they have no formal number.

We do not all of us realize the close connection between physiological and psychological facts. The greater our understanding of the latter the more intelligent will be our application of the former, and the better our results. If only viewed from a lower plane, that of tangible results, a knowledge of psychology is most useful, as by knowing the laws to which the child's development conforms, we can produce the maximum of result with the minimum of effort. Of course, viewed from a higher plane, the good of the child, psychological knowledge is not only useful but indispensable. If it is impossible to run a mere machine without an intimate acquaintance with its mechanism, is it not the height of absurdity to expect to be able to educate and develop such a complex organism as a child without seeking to know even the most elementary laws of its being? And yet it is being done day by day all over the country, but not in such a measure as formerly. In these days of increased enlightenment we are beginning to see the importance of preceding the teaching of the child by the study of the child.

Class I.—I think most people will agree that the average child takes a very large step forward in his sixth year. Often children who have seemed to be very dull in the lower classes suddenly find their intelligence at the age of six. I have seen it over and over again. So that in this class our number takes a good step forward, and proceeds by slow stages to thirty. Every step is demonstrated by concrete examples, so that the children have actual experience of the numbers with which they deal.

The actual syllabus for the year is :—

(*a*) Number to thirty, including operations in addition, subtraction, multiplication and division.

(*b*) Tables and practical application of them to $3 \times 12 = 36$.

(*c*) Sums dealing with money. Parts of 1*s*., 2*s*., 5*s*., 10*s*., 20*s*.

This is all mental work. Written work is not started until the children reach Standard I.

In this class they occasionally do addition and subtraction of units from the blackboard in connection with simple problems, but no paper work.

With regard to teaching tables, each step is demonstrated and practical examples given before the tables are committed to memory, so that the child understands the meaning of such a table. If children are not taught in this way, they will in all probability answer you quite glibly, and tell you that $3 \times 5 = 15$

But if you ask them a simple problematic question, such as, "I had three bags with five nuts in each, how many altogether?" you will find that they are not nearly as ready with their answers, because they have not understood the practical application of multiplication tables. It is for want of this kind of intelligent teaching that problems become such a great bugbear in Standard I.

The money sums are, of course, very simple, such as :—

"One doll for 1*s.*, how many for half a sovereign? for 5*s.*?"

"A top cost 6*d.*, how many for 2*s.*? How many for 5*s.*?"

"How many half-penny buns for 6½*d.*? What change from 1*s.*?"

"If I had a sovereign, to how many children could I give 1*s.*? 2*s.*? 6*d.*?" and so on.

I suppose it is not necessary to say that we teach number on the decimal system. It is almost universally accepted now. So that it is of the utmost importance the children should have the composition of the number ten at their fingers' ends, so to speak. They should be able to answer instantly any question on it.

If this is insisted upon, the higher numbers will present little difficulty.

9 and 7 becomes $9+1+6$.

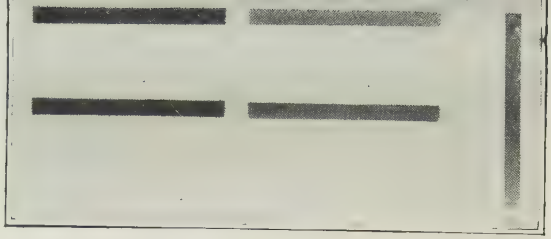
6 and 8 ,, $6+4+4$, and so on.

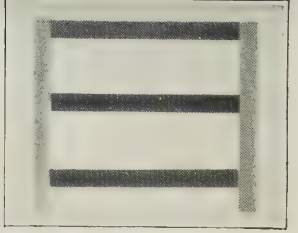
It is a good plan, after asking such a question, to say to the child who answers, "How did you do it?" and let him work it aloud for the benefit of the class. It is rather difficult at first to get children to do this, especially new admissions. They prefer to calculate in the time-honoured or dishonoured method of nodding heads, counting fingers or dots. But once they get into the habit of calculating in this way it is invaluable to them, especially in Standard I.

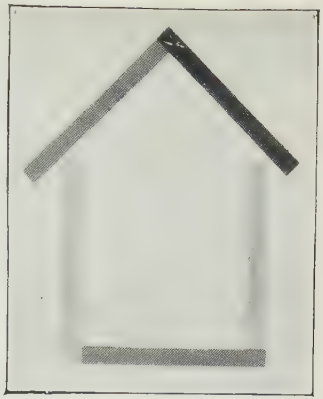
STANDARD I.—The attitude of the children in this class towards their arithmetic is the truest test of the value of the teaching in the lower school. If the teaching *there* has been intelligent, they ought to find little difficulty on meeting with paper work and problems. We teach on Scheme B, which embraces addition, subtraction, multiplication and division, with totals not exceeding 99. In this class, as everywhere else in the school, the concrete precedes the abstract. Sums are worked with actual material objects. Bundles of sticks are most frequently used, ten in a bundle, with an elastic band round them, which can easily be removed for subdivision into units.

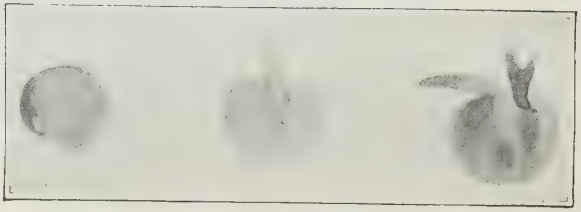
Tables are taken as far as $6\times12=72$, and mental problems in money rather more advanced than in the previous class.

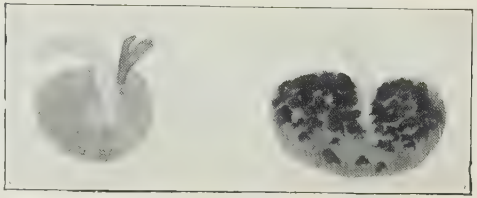
Long tots of units are very useful in this class for sharp practice in splitting up the numbers and building tens. Children learn to do this with great rapidity. Take as an example :—











TEACHER'S ILLUSTRATIONS FOR SCHEMES (see p. 64).

7
9
8
5
6
8
9

This is worked aloud by a child in the following method :—9 + 1 = 10, + 7 = 17, + 3 = 20, + 3 = 23, + 5 = 28, + 2 = 30, + 6 = 36, + 4 = 40, + 5 = 45, + 5 = 50, + 2 = 52. Then it may be worked by another child from the top downwards in the same way.

Another good method of getting the children to add sharply is to arrange numbers in the form of a clock, e.g. :—

The children may start at any number and go round the clock until told to stop.

Another method is as follows. A clock is made with a number in the middle. This can be used for either addition, subtraction or multiplication.

```
      7
    5 + 6
4 + 8 + 3
    2 + 9
      5
```

This gives such exercises as—
8 + 6, 8 + 3, 8 + 9, etc.

With a small number inside, the clock can be used for subtraction, e.g. :—

```
      9
    6   8
7   3   6
    5   4
      8
```

This gives 8 − 3, 9 − 3, etc.

These clocks can be used with advantage with the sixes as well as with Standard I.

The same clock used for multiplication purposes will give such exercises as 3 × 9, 3 × 7, 3 × 4, etc. All these devices are of great use in making the children alert with their answers.

From the time when the class begins to take sums on blackboard and paper,

every sum is given in a concrete form. They do not have *sums* the first part of the year, and *problems* later. All the sums, however simple, are given in problem form. This is where, I think, so great a mistake has been made in the past. Children have been taught to do sums, just adding, subtracting, multiplying and dividing numbers without any reference to the concrete. Then one day they are introduced to problems which they have to connect with these sums. Then begins the difficulty. And many are the little devices children will resort to in trying to solve these problems. If you always use more than two numbers in your problems in addition, as soon as they see two numbers only in a problem they will instantly rush to the conclusion that it must be a subtraction sum, and work it accordingly. Again, if they get a large number and a small one in a problem, they conclude instantly that it must be either multiplication or division. The question is which ? The issue is often only the result of guess work. In this connection we find from practical experience that one should often give such problems as the following, to solve which children really have to use their brains.

" How many boots in 3 dozen pairs ? "

" A blacksmith has 92 horse-shoes. How many horses can he shoe ? "

" If I have 65 eggs and 9 are broken, how many are good ? "

" A man walked 36 miles one week and 49 the next week. How far did he walk ? "

Written arithmetic should not be taken too often, as familiarity in this as in other things breeds contempt, and the children become careless. We take it only twice a week, two half-hour lessons, and we find that the children take a real pride in getting their sums right, especially when they are promoted to the honour of a book to work them in. And this plan works well. If a child with a book gets a sum wrong, he does not have his book again until he proves his ability to get them all right, and books are not given to the children unless they have had the full complement of sums right several times following.

From this account of the way arithmetic is taught it will be seen that the same principles hold good throughout.

1. Procedure, gradual, logical and slow, from one step to another.
2. Every step clearly and fully illustrated before proceeding to the next.
3. Variety of concrete illustration, which always precedes abstract calculation.

CHAPTER VI

KINDERGARTEN OCCUPATIONS: (1) BRUSHWORK; (2) CLAY MODELLING; (3) DRAWING

Brushwork.—It will be noticed in the syllabus that various occupations are allotted to the different classes. But these are not rigidly adhered to. Any class may take any occupation, provided that the exercise chosen is suitable for the child in his present state of development. The work of one week may be best illustrated by brushwork. Another subject may not afford opportunity for using the brush, but may be well illustrated by paper folding. Whatever occupation seems best is used. This allows for great latitude on the part of the teacher, who has a great variety from which to choose. The occupations mentioned are those which are most commonly taken in each class.

The occupations of drawing of various kinds, clay modelling, and brushwork or colouring are in use from the lowest class to the highest. These occupations are of the greatest educational value, and should, I think, come first in every school. Clay modelling induces manual dexterity of both hands, as both are equally used. Nicety of touch is also promoted, as great care must be taken in putting the finishing touches to any model. Brushwork and colouring satisfy, and train to greater perfection, that love of colour which is instinct in young children, while drawing is one of the most natural modes of self-expression to a child. To my way of thinking these three occupations most fully satisfy, please and educate the child, and they are the three which lend themselves most readily to illustrating Nature work. Almost every week's work can be illustrated by means of drawing, brushwork and clay modelling.

Some people start brushwork with the babies, but this is only possible where there is an extremely small class, certainly not more than ten or twelve. With us, colouring takes the place of brushwork until the children are five years of age. Every week a picture is printed off for them from the A B C copier, and they are allowed to colour it with crayons.

Then, when they are five, they are promoted to the dignity of paint and

brushes, and great is their delight. They start by learning the correct way to handle the brush, and how to place it in the various positions. Then they do a little blob work, to accustom them to the use of the brush. But as soon as possible they proceed to painting from Nature, sometimes by means of blobs combined with free work, while sometimes purely free work is done. This occupation is, I think, the one best loved. To see a class of Standard I children, all with their flowers beside them, painting from Nature, is a charming sight. Their intentness and complete absorption, their attention to detail, their critical attitude, are perhaps best displayed in a painting lesson.

From the very first, purely original work is encouraged, and in Standard I the children are very rarely shown exactly how to paint their specimens. As a rule, a Nature lesson precedes the brushwork. This helps them to notice all the little details which have to be reproduced, and generally this is all the help they get. Sometimes if the subject is a very difficult one, the lesson may be taken step by step, but if this is the case, it is always followed in a few days by a repetition of the lesson, when the children are expected to paint the specimen entirely unaided. But these occasions, when direct help is given, are very rare indeed, perhaps not twice in a term. Better for the children to spoil a little paper than to have their power of initiative and spontaneous production hindered and perhaps destroyed. As I have said with regard to drawing from Nature, this free work shows in a way that nothing else can do the limitations and imperfections of the mind of the individual child. As he sees, so he endeavours to reproduce, and his very peculiarities of vision, which are now faults, may be turned to good account by opening up to us and to him new avenues of thought and production.

In the ideal school of the future every child will have his own paint-box and brushes, and mix his own colours. But we have not attained to that yet. Sufficient paint for the class has to be mixed beforehand and put out on palettes. Standard I have special palettes, with three divisions, as they often need three separate colours in the same lesson. The painting of cherries requires three colours, brown, green and red, for the stem, leaves and fruits respectively ; so with the painting of lilac, laburnum, apples and pears, where a small portion of the branch has to be painted first.

We always provide the children with good-sized sheets of paper for their brushwork, so that their movements are not cramped. As a rule, a square 7 inches by 7 inches is allowed for each child. For long-shaped studies, such as those of the tulip, daffodil or moon-daisy, a piece 7 inches by 4 inches looks very effective. Last autumn we painted chrysanthemums on long panels of tinted paper about 12 inches by 5 inches. Very bold work was done on them, and they looked charming when mounted. Moon-daisies are very effective on bright scarlet or dark-brown paper, but in any case, whatever paper is

used, the white paint must be thick, or there will be no result, and it must be gone over two or three times, for the paper absorbs a good deal of Chinese white.

Snowdrops, crocuses and violets look best on an oblong paper, but in this case the long side of the paper should be parallel to the long side of the desk, not at right angles to it, as in the case of the chrysanthemum or daffodil.

Besides papers, the children all have their own brushwork books, which they use in turn with the papers, sometimes one and sometimes the other. Lilac is a rather difficult study to paint, as the flower is so small and the inflorescence so massy. I have never seen it shown in any brushwork book, so we had to originate our own way of painting it, which is decidedly after the impressionist school. Still the treatment gives a very pleasing effect. In order to represent the flower, the brush is held upright, at right angles to the desk, and with the wrist and forearm pressed to the desk, so that the hand works freely from the wrist, small dots are made, with here and there a blossom painted, until the shape of the bunch of lilac is complete.

Poppies again are difficult, and we only get a few really good representations, but cornflowers are most charming things both for painting and free crayon work, and done quite easily by the children.

When painting tinted leaves, each child is given a leaf, and then allowed to ask for the colours he will need to faithfully reproduce it on his paper. This enables one to discover any tendency to colour blindness.

We often use a certain flower as a basis for forming designs. Such flowers as the tulip, crocus, Canterbury bell, cornflower, and violet, lend themselves to the purpose of design. The design may be produced with either paint or pencil and crayon. The children love to originate these for themselves, and some of them show great talent in arrangement of detail.

With regard to the time devoted to this subject, the older children get two half-hour lessons a week, as a rule, in spring, summer and autumn, when there is such an abundance of material for Nature study. In the winter one lesson a week is given. We should like to be able to give more time to brushwork, but that is impossible, unless one specializes, and that is hardly advisable in an infants' school.

Care should always be taken that the colours used are as true to life as one can possibly get them. To some people green is just green, without distinction of shade, and whether they were painting a violet or a lilac leaf they would mix the same colours in the same proportions. It is a pity to supply children with colours mixed in this way. Instead of developing and training their fine sense of discrimination, such treatment will serve to blunt and destroy it.

Paint brushes will last for some time if properly used. Get good brushes in the first place, and then take care of them. Children should never be allowed to put them in their mouths, and after using they should be cleaned by taking about four at a time and shaking them well in clean water. Then in order to dry them a little, and bring them to a fine point, hold them in the hand with the hairs pointing to the floor, and give them a sharp shake. Finally place them with the handles downwards in a mug or jar, so that all the points are upwards, and not coming in contact with anything. The receptacle should not be a tall one, or the points of the brushes will touch the sides.

In Nature brushwork, as in everything else, we try to get the children, not to reproduce a *generic* flower or fruit, but to show the well-defined characteristics of their own particular specimens. Much more is thought of the work of a child who has tried to paint what he can actually see, even if not represented very accurately, than that of another child who has painted what he thinks he ought to see. In many cases the actual workmanship will be poor, but one should not primarily aim at strict accuracy and fineness of work. If the child has tried (as he will) with his whole heart, soul and strength, to show on his own piece of paper, with his own hands, what his own eyes have seen, and his own brain understood, that is as much as we can expect of him in the infants' school.

But it is really surprising how these small children can be led to be artistic in their painting ; how they can be taught to see that the leaves on a twig do not look naturally represented if you stick them on stiffly, one under the other. They will soon learn to notice that if you wish to represent the leaves as *growing* from a stem you must make the midrib slant or curve *towards* the stem.

One great aid to improving the accuracy of brushwork is not to correct the child's mistakes yourself, but to get him to say where his work is wrong, and what is wrong, by comparing his specimen with his reproduction of it. He will not make that mistake again.

I hope that the photograph showing brushwork done by the children will make these points clear. I have tried to show as many different studies as possible, with just a few children's representations of each, so that the individuality of the work may be seen. Of course there are occasions when the whole class has to copy from one specimen, which is placed in a prominent position before them. In this case there will naturally be some similarity in their paintings.

I append a list of some of the subjects we have taken with Class I and Standard I, the simpler ones only being taken by the sixes.

Brushwork taken with Children of Six and Seven

SPRING TERM.

Snowdrops and leaves.
Crocus and leaves.
Daffodil and leaves.
Tulip and leaves.
Violets and leaves.
Primroses and leaves.
Anemones and leaves.
Cowslips and leaves.
Bluebells and leaves.
Bulbs in various stages of growth.
Twigs and buds of trees in various stages of growth.
Birds' nest in a tree.
Bulrushes.
A fish.

AUTUMN TERM.

Wheat, oats and barley.
Harvest mouse's nest.
A windmill.
Apple and leaves.
Pear and leaves.
Plum and leaves.
Oak leaves and acorns.
Horse-chestnut leaf.
Sprays of hazel nuts.
Virginian creeper.
Tinted blackberry leaves.
Sycamore and ash seeds.
Beech-nuts, etc.
Hips and haws.
Chrysanthemums.

SUMMER TERM.

Sprays of lilac.
Laburnum.
Poppies.
Cornflowers.
Canterbury bells.
Moon-daisies.
Clover.
Cherries and leaves.
Strawberries and leaves.
Sprays of beech.
Sprays of elm.
Bees.
Caterpillar on a leaf.
Butterflies.
Sweet peas.
Wild roses.

WINTER TERM.

Ivy leaf.
Sprig of holly.
Spray of yew with berries.
A fir-tree.
Mistletoe.
Leaves of trees (pressed, dried and mounted).
Designing.
Painting Christmas cards.

Clay Modelling.—There are so many books published on this subject that it will not be necessary to say much about the general teaching of clay modelling. Just a word or two as to material.

The models may be made with either clay or plasticine, both of which have definite advantages and disadvantages.

PLASTICINE.—This is a material that is always ready. It does not need mixing up like clay. The grease, with which it is made, keeps it in a permanently plastic condition. For this reason it is easy to manipulate. It does not crack in the hands as clay often does, so that time can be taken

over the models. For this reason plasticine is good for beginners who cannot complete their models quickly, because it will not become dry and brittle in the using.

The great drawback to the use of plasticine is its initial expense. Harbutt's plasticine is 1*s.* 3*d.* per lb., and one pound does not go very far. On the other hand, once it is bought it lasts a considerable time. On account of its expensive character one cannot keep many finished models permanently, but owing to its being a greasy substance it is quite possible to keep the children's work for some months (out of the dust), and then roll it up again for further use. If the plasticine becomes dry it should be kneaded up with a little vaseline.

Each child should keep his plasticine in a tin box, and if it gets dirty it should immediately be replaced by a fresh piece. Some people maintain that this substance is not as wholesome as clay, but the inventor claims for it not only harmless but also antiseptic properties. At all events, if each child keeps his own there can be no possible risk of infection.

Clay.—Clay is a much cheaper material, so that if it is used, more children's models can be kept. Because it is cheap, larger quantities can be given out, and life-sized models of fruits and flowers can be made. But it has this disadvantage. It dries very quickly, and if the children are slow over their models, the clay becomes brittle and useless before they have finished. For this reason the models which are kept need great care in handling, or they will fall to pieces when touched. This is especially the case with such models as cups, teapots, and baskets, which have handles modelled on, or fruits with stalks.

When the clay is collected, any dirty pieces must be thrown out, and the remainder put back into the clay bucket, where it is kneaded up with a little water.

Both clay and plasticine might be used in a school, the former for large models, the latter for small ones.

The Care of Clay.—Where one clay bucket has to be used between two or three classes, one frequently hears from the teachers such a remark as, "I could not use the clay this afternoon. It was soaking with water." Or another says, "I do wish people would see to the clay after using it. It was impossible to use it this afternoon, because it was so dry."

I think that is probably why plasticine is used so much. The clay requires care in using. At the close of a lesson the children's models should be broken up into small pieces, sprinkled with water and kneaded until the whole is thoroughly plastic. Then it should be covered over with a damp flannel, which should be pressed lightly down upon the clay to exclude air and prevent evaporation. It will keep in condition all through the holidays

CLAY MODELLING.

if the clay is well damped, the covering flannel made *wet*, and the cover put on tightly.

Zinc pails, sold for the purpose, are best for keeping the clay in. Ordinary buckets will rust with the moisture and spoil the clay.

Boards and Tools.—Properly prepared grease-proof boards must be used with plasticine, as ordinary surfaces absorb and reduce it. These can be obtained at any educational supply. Wooden boards are supplied for using with clay, but if these cannot be obtained, slates may be used.

Tools are not essential for little children. Matchsticks will, as a rule, make all the markings necessary. It is well, however, to have some tools of different varieties for the older children, as the markings can be more correctly copied with the tool.

The Making of Models.—For clay modelling there is one great rule :—

The children must model from life. Never let them attempt to model an object, at all events for the first time, without having the actual object, or failing that, a model of it, before them. *Pictures will not do.* They do not convey sufficient ideas of the three dimensions, and children cannot be expected to model accurately from them. The idea at the bottom of all true modelling is copying from an actual object. Therein lies one of its chief values. By the model he produces the child shows to what extent he has seen and understood the object. By it he makes visible to us what is his thought about it. To use the words of Froebel with regard to his doctrine of creativeness—"He renders the inner outer." And the more models that can be provided the better, because each child's chance of actual observation is greater. Such things as fruits and flowers can often be provided in sufficient quantity to give each child one. This is the ideal condition of things. Every child tries to render truly in his clay the characteristics of the specimen which he has before him, not the general characteristics of that class of objects. If only one specimen can be obtained, every child should have an opportunity of examining and handling it himself before he attempts to make his model.

Modelling from memory is an excellent *test*, as it recalls to the child the result of his former observations, strengthens his powers of remembering, and develops further co-ordination between brain and hand. But of course, the actual presentment of the object to the child must go before this ; the impression is the necessary condition of the idea, by all psychological laws.

One frequently sees children rolling out long, thin ropes of clay in their hands, and making with it outlines of familiar objects. Houses, tables, chairs, etc., are the great favourites, while one often comes across a board with lines

of figures or letters made in this way. Babies especially find this a particularly fascinating game, and although it cannot strictly be called modelling, I see no reason to object to it any more than one should object to thread or stick laying.

Scheme of Modelling.—A good scheme of modelling should possess these characteristics among others:—

1. It should be well graduated, not made up in a haphazard fashion.
2. It should be in connection with the seasons, so that the actual objects can be obtained.
3. It should provide for modelling things which are really interesting to the children.
4. It should permit of correlation with the other school subjects.

For a school just starting modelling it would be well to make this subject the basis of the general scheme of work. As a rule, most people select their Nature lessons first, and then fit in the rest of the curriculum, but that would not provide an entirely graduated scheme for modelling. Of course, one graduates every subject as well as possible, but by making clay modelling the basic subject, one can secure more perfect graduation. In schools where this subject has been taken for years, exact graduation is not of so much importance as it is in a school where it is just being started. A scheme after the style of the following might be used for the first year of any school where this fascinating occupation of legitimate mud-pie making is taken up. This list will serve for all classes, if the younger ones take only the simpler models and the upper classes take them all. Needless to say, the models should be practised by the teachers before they attempt to take them with the children.

Scheme for Autumn Term

Clay Modelling.	Nature Lessons	Suggestions
A ball. An apple. A pear. A plum.	Autumn fruits.	Apple and pear pips to be planted in pots.
A bunch of haws. A bunch of hips. A nut. A cluster of nuts. An acorn. A spray of acorns. A mushroom. A basket.	The lanes and hedges. A blackberry bush. Nut-bearing trees. Kinds of nuts. The oak tree. The squirrel. Mushrooms.	Country walks to be taken, and specimens brought back of tinted leaves, hips and haws, oak leaves and acorns, nuts and blackberries, etc., to serve as models. Tree fruits may be gathered and modelled by the older children.
Biscuits. A loaf. A rolling pin.	The cornfield and the corn. The miller and the mill. The baker and the bread.	Small bundles of wheat, oats and barley to be obtained; if possible, visits to miller and baker.
Swallows' nest.	Migration of birds.	
Poppy capsules.	How seeds are scattered.	Seeds collected in the garden.
Bulbs.	How plants store up food.	Bulbs planted for the spring in pots and in garden.

I have made this scheme to begin in the autumn because it is after the summer holidays that most people begin their new work. All the models that I have mentioned can be easily obtained, and most of them without expense and in fairly large quantities. With regard to apples, pears, and plums, many of the children will be delighted to bring their own, and so increase the supply. Many interesting things for modelling will be found in their walks, and not only for modelling, but also for Nature lessons, drawing, paper cutting, and brushwork.

If bunches of wheat, oats and barley can be obtained, they will make charming accessories to a reaping game.

It will not be necessary for me to analyse the schemes in detail, as the models mentioned are very simple ones.

Clay models are, as a rule, made from one of three fundamental forms : (1) the ball, (2) the cylinder, (3) the cube. But there are some cases in which we flatten out the clay between fingers and thumbs into a thin plate. We do this when we make leaves of trees, but these do not come into the first term's work.

The apple, pear and plum form three well-graduated lessons to begin with ; the hips and haws are made in much the same way, only smaller. The stems may be made from tiny bits of clay rolled out thin, or you may use actual twigs from the trees. The latter plan is the more successful one. Then we proceed to objects which are rather more difficult. The acorn is made in two pieces, and the markings on the cup should be carefully noticed and reproduced. The flaky appearance of the inside of the mushroom is made by drawing the tool across, cutting into the clay, from centre to circumference, in fine close lines. It should be cut at the edge in places to produce a realistic appearance. The older children might make a group of mushrooms (*see* illustration). Biscuits are so easily made that they should be taken in the same lesson as the cottage loaf and rolling-pin, as they are all simple objects. In modelling poppy heads, the top with its crinkled edge and fine ridges should be carefully copied. For the lesson on bulbs, several kinds should be obtained, and the children should do each kind in turn.

Scheme for Winter Term

Clay Modelling	Nature Lessons	Suggestions
Potato. Carrot. Turnip.	Vegetables.	The last week of December should be given up to the idea of Christmas. Songs, games, stories and occupations should all turn upon this. Every class should have a Christmas tree painted for it. They themselves should draw and cut out various toys for the tree, and paint Christmas cards for their parents (*see* p. 134).
Orange. Brazil nut. Christmas pudding. A dish. An ivy leaf Mistletoe. Holly	Winter time. Snow and ice. Christmas time. The fir tree. Evergreens. Holly, ivy and mistletoe. Christmas decorations.	
A shoe. A cap.	Lessons on clothing. Cold countries.	Now, when there is not much opportunity for taking Nature work, such sections as food and clothing will come in very appropriately. The lessons on the Laplander are usually keenly appreciated.
A cup and saucer. A saucepan. A frying-pan. A teapot. A kettle.	Lessons on a house—furniture, utensils, laying a table. Lessons on articles of food.	

The objects suggested for modelling this term present more difficulty than those of last term. Ivy, holly, mistletoe, a teapot and a kettle should not be attempted by the younger children, as they are rather complicated.

The dish, saucer and frying-pan are made from the ball by placing the fingers of both hands beneath it, the thumbs on the top, and pressing it hard, turning it round all the time. This will make a hole, which has to be made gradually larger and larger, until the bottom and sides become quite thin.

There are various ways of modelling leaves. The older children should do all the modelling with their fingers. The younger ones might make a thin plate of clay between the fingers and thumbs, and then cut the leaf out after drawing it upon the clay with the tool. Or, more elementary still, press the leaf upon the clay, right side downwards. When it is raised its shape will be imprinted upon the soft surface, and the children can cut it out with the tool.

Scheme for the Spring Term

Clay Modelling	Nature Lessons	Suggestions
A pea and bean. A flower pot and saucer. A radish. A tomato. Peas in a pod. Beans in a pod.	Germination of seeds. Parts of a plant. Parts of a flower. Peas and beans.	Peas and beans should be germinated in school, also wheat, oats, mustard and cress. Children should be given some to cultivate at home.
Daffodil and primrose leaves. Trowel. Watering-can. Hoe and rake. Birds' nest and eggs.	Spring flowers. The garden. Snails and slugs. Gardening tools. Lessons on birds.	Plenty of time should now be spent in the garden, weeding and watering, planting the seeds and watching them grow. In the spring the Nature calendar grows apace; every day brings its tribute to the spring. Walks should be taken to note the advance of vegetation.
Milking stool and pail. Cream pan. A bucket. A pigs' trough.	Series of lessons on a farm.	

Scheme for the Summer Term

Clay Modelling	Nature Lessons	Suggestions
Gooseberries. Currants. Cherries. Strawberries. Strawberry basket.	Summer fruits.	These fruits should as far as possible be modelled with their leaves, at all events by the older children. Cherries and strawberries are very effective painted.
Scythe. Moon-daisy. Beehive. Caterpillar on a leaf.	Hay-making. Flowers of a hayfield. Insect life.	For this section bees and butterflies might be temporarily imprisoned.
Boat and oar. Shells—starfish. Spade and pail. Anchor. Lighthouse. A fish.	A series of seaside lessons on fish of various kinds, shells, coral, sponge, etc.	We always precede our seaside section by a visit to the sea, where treasures are gathered in abundance for future use.

I need not comment further on the scheme, except to say that models which sound very simple need not necessarily be so. For instance, a currant is easily made, but natural-looking strings of currants, with their own foliage, are not such a simple matter. A strawberry is not *very* difficult, but when you come to build your strawberries with their ternate leaves on a clay slab it is a different thing. So with most of the models. You can make them simple enough for the youngest children, or difficult enough for the elder ones, in accordance with how much detail you put in.

In every modelling lesson, as in every drawing and building lesson, the children should be allowed an absolutely free hand for the last five or ten minutes. Let them model exactly what they please; you will be surprised at their ingenuity, and in many cases their accuracy. True, there will doubtless be many inaccuracies, but these will advance your knowledge of child nature, and incidentally the intelligence of your teaching, by showing you *the kind* of things that children remember, and the points that escape them. As I have said before, this free work shows up so many things that otherwise we should not see.

Clay-modelling is an occupation that is of immense value to the child in every way. Physically, mentally and morally he is improved. The equal use of the left hand with the right induces a more perfectly developed brain,

and there could not be a better occupation for teaching control of the fingers and improving manual dexterity.

Drawing.—The days are, let us hope at least, happily over when poor mites of five were expected to copy an intricate and uninteresting pattern on quarter-inch squares, straining their eyes and cramping their fingers. We have recognized now that, as it is the larger groups of muscles that develop first, so it is they which should first be exercised, and so further developed.

Notice how Froebel makes this a great point. He starts with the ball of Gift I, which requires the hand just to hold the plaything—the hand as a whole. Then the smaller muscles of the hand work together with the eye in the second Gift, to help the child to a recognition of form. With Gift III comes further use for the fingers—the cubes must be placed in position, and placed accurately. Gift IV demands still further nicety of touch, and in Gift V great care must be used, and the touch must be light in the extreme, or the effects will be disastrous. And so we find in the occupations. We pass from plane to line, from line to point, from materials that require little manipulation to those that demand trained manual dexterity. So many people lose sight of this. Look at the lists of occupations set for the various classes in infant schools. What principle guides the choice of them ? None at all in all probability. They are chosen haphazard, perhaps because they are taken in —— school or because "Miss —— likes those occupations," or perhaps because they produce such pretty things to show. No such arbitrary ideas should have a place in the education of children. Principle—principle—that is what we lack. Let there be some recognized, tried, and proven principle at the bottom of all your work, and then and then only can you hope for success. See if you know why you do this, that, and the other—what is your reason for choosing this and rejecting that—and let it be in accordance with a good and sound principle.

And just as it is in the other self-expression lessons, so should it be in the drawing. Freearm and freehand work should come first. Some people are so afraid of seeing unsightly blackboards and papers that they lose sight of this fact—that the all-round development of the child takes precedence of the spoiling of a little material. Do not mistake me. I do not advocate licence, but liberty guided in well-defined channels. Every time a child makes the necessary movement with his arm for the production of an oval, his power of drawing that oval is strengthened. It is a physiological fact. The muscles learn co-operation, the eye is trained, the will is strengthened, and the child feels that he has achieved a result. And many interesting objects can be made from the oval—pies, dishes, pans, ladles, milk-jug and

sugar-basin. These could be taken during a course of lessons on food—or even taken separately as a course in themselves. No doubt you will be discouraged by the first few attempts, but you will find that the children's powers will increase rapidly after a few lessons. These are a few points that must be kept in mind, and the following rules must be strictly adhered to:—

1. Stand at arm's length from the board.
2. Hold the chalk as far from the point as possible.
3. Draw the line in the air a few times before putting it on the board.
4. Let the line be bold and clear, and in one piece.

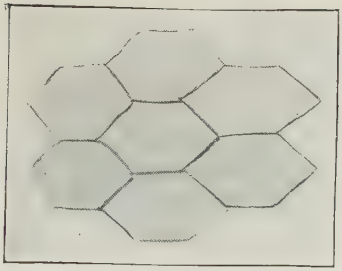
I know from practical experience how difficult it is to make children keep these rules. The natural tendency is to stand close to the blackboard with the chalk clutched as near the point as possible. Then with infinite difficulty they attempt the line, and rub it out. Thereupon follows an ugly smear, and very likely a wet finger is put out to make matters worse. Rubbing out must be discouraged from the first, and confidence in their own powers encouraged. You see a boy standing disconsolately before his empty board. He is afraid to mar its ebony perfection. But encourage him a little. Steady his arm at the elbow with your hand, giving him if necessary a little guidance, and he will feel more confidence. That is half the battle. Once he has confidence he will soon draw.

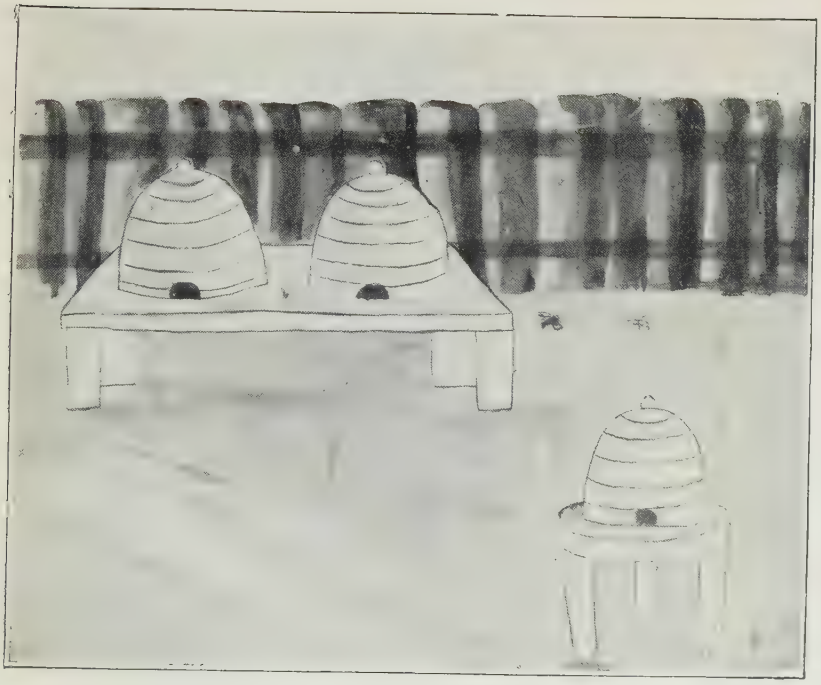
Another rule to be observed, if you would teach drawing successfully, is to eliminate all unnecessary details. Let your outline be good and sufficient, but do not elaborate, and always teach children to put in the long lines first. When these are done correctly, detail may be attended to, but not before.

At however late an age you start blackboard drawing with children, they should always go through courses on the oval and circle as a preliminary, and for various reasons:—

1. They will learn a great deal of the technique of drawing—the eyes will gain the power to see correctly; the hand will be trained to steadiness, lightness and obedience, and ideas of form will be greatly strengthened.

2. The oval and circle repeat themselves constantly in all natural forms. Flowers and fruit are mostly based on the circle, leaves on the oval, and stems are roughly cylindrical. The children must recognize these facts before they can be expected to reproduce well. Animal forms, too, are based on the same principle. Look at the oval body of a bird or fish, the rounded curves of such domestic animals as the cat or rabbit. Does it not seem common sense to expect that a child who can draw ovals of various sizes and in various positions will be better able to grapple with the difficulties of reproducing natural forms than one who has not gone through this previous training and discipline?





TEACHER'S ILLUSTRATIONS FOR SCHEMES (see p. 65).

We hear many cries at the present day about the inferiority of the English workman. In the matter of skilled labour we hear that he is far below some of his Continental neighbours—that the greatness of England is on the wane, and many other similar remarks. Surely that will not be so in the near future. If our boys are trained to close observation and intelligent reproduction during their early days in the infant school, and then on through the Standards, and perhaps through the science or technical school, it should lead to that very skilled labour we are said to lack. It is the brain behind the hand that we want, not blind stolid reproduction of the product of other people's thoughts. We want intelligent, thinking people—men able to conceive an idea as well as to carry out one preconceived. This will raise the level of British productions. I most firmly believe that teachers in the infant school are more closely concerned with this than they think. It is our work, our privilege to awaken intelligent thought in the minds of our little pupils, to stimulate their inventive genius, to encourage original production, be it never so humble. Remember that every such production represents a thought conceived in the brain of a child. It is his own, his very own, in just the same sense that the artist's picture is his, and the musician's composition is his, an expression of self by which he reveals himself to the world. And every time a child produces such work his creative power is strengthened, his will, his confidence, his self-respect increased.

Therefore I say, do not keep your children at blind copy-work. In some things it is necessary in order to make a start to teach them to be careful, and to test and strengthen their powers of attention ; but once the child has gained a little power let him work from within. Give him an object to copy, and let him do what seems right to him. People may object to the spoiling of his paper or book, but do you not see that his very faults will prevent the spoiling of material in the future ? By his unaided efforts he will visibly express to you what ideas he has in his mind, what wrong impressions have taken root, and you will be enabled to see his mistakes and correct them in a way more thorough and accurate than you could ever have the power to do without this glimpse into the child's mind. If I can only impress this on the minds of my readers I shall feel that I have not written in vain. More and more every day I realize the importance of making this a guiding principle in all one's dealings with children. Do not strive at first to put so much into the little brain, but try, by means of self-expression, to find out what is already there. Educate before you instruct, and you will instruct by means of education.

It may be that my reiteration of the importance of spontaneous effort and original work in brushwork, modelling, drawing, and every other lesson is becoming a little wearisone, but it is really impossible to over-estimate its

value and to over-press its claims. And in spite of our ever-increasing emancipation, many people are over-timid when launching out into such directions as these. But there is no reason for such timidity. Only those who work in this way can speak of the joy it brings to teachers and children alike—to the teacher when she realizes that the aim of her teaching and training is not to produce a certain fixed and unvarying result, but to stimulate effort, and to watch for and guide the growth of character and originality in each of the little ones committed to her care. And what of the joy of the child ? In an atmosphere of peace, harmony and beauty he unfolds his powers day by day, and week by week ; he rejoices increasingly as he feels his ability *to do* strengthen and grow. As a flower expands and develops in sunshine alone, so the child's nature awakes and unfolds its beauty only in the sunshine of love and sympathy. By repression and harsh treatment his character is warped and all his powers stultified. It is only when the child feels that he is a free agent that we see him at his best in school.

I do not intend to give any details with regard to the other occupations. That they are many and various will be seen from the syllabus for each class. We do not tie ourselves down to taking any particular occupation right through a year. Sometimes a course in geometrical tablet laying may be taken for one term ; then the next term its place may be taken by geometrical paper folding, while during the third period designing may be substituted. In this case the three occupations all have a hidden connection with each other. The children are gaining notions of geometry all the while, but the various mediums used give a variety and interest unattainable in any other way. Mat weaving, cane weaving and paper twisting form another group.

Kindergarten occupations should be introduced to children in a logical order. *First* the *solid* body, in Gifts I to VI. Little children should always have experience with the ball, cube and cylinder, at all events before proceeding to *plane* surfaces, which comes *second*. Tablets may now be introduced, and children led to see their connection with the former group by cutting thin slices from clay cubes, balls and triangular prisms, to form square, circular and triangular tablets. Paper folding comes next. The *third* group is *lines :* first laths, sticks, rings, as a transition step, and then drawing, which introduces lines pure and simple.

Lastly we come to *points* : beads, shells, beans, cork and pea work, Kindergarten pricking and sewing.

When children have once been through a sequence of this kind, where by means of the experience with solid bodies, plane surfaces, lines, and points, they see their connection and derivation, they can be introduced to any occupation whatever. All occupations come under one head or another, and it is easy and useful to draw up a table for one's own guidance in selecting the

ones which are best for use in the various classes. There are a few rules which should guide our choice of the occupation or expression lessons.

1. They should provide material which is suitable to the child's manipulatory powers.

2. They should never be *merely* mechanical or decorative.

3. They should never provide exercises far above or below the child's execution.

4. They should be such as will train him physically, mentally and morally.

5. They should always be suitable for illustrating the work on hand, and so will vary from time to time in accordance with the subjects chosen.

6. They should always provide graded exercises, so that each lesson is an advance upon the previous one.

With these points in our minds, we shall be sure of choosing for our children such occupations as will provide for their threefold development and growth.

CHAPTER VII

STORIES AND RECITATIONS

STORIES have a very important place in the education of children, especially little children. They perform a function which nothing else in the world can perform as well. To deprive children of stories is to rob them of their rightful inheritance. The stories were written expressly *for* them, to be heard or read *by* them at a particular time in life. It is not the same to have them supplied afterwards ; it is too late for them to do their own proper work then. And what is this special function performed by stories, rightly and wisely chosen ?

1. They satisfy the child's love of the beautiful, by taking him out of the world of sense into the realm of imagination.
2. They supply an ideal of life.
3. They make up to the child for lack of experience.
4. They teach him to sympathize with all Nature.
5. They quicken his perceptions with regard to others.
6. They train him to a love of true poetry, literature and history.
7. They are a source of delight to the child.

But if the story is to be all this, it must be more than wisely chosen. It must be *told* to the child in simple, poetical language, with appropriate dramatization. And this means preparation. The language in which the tale is to be told should always be a subject of special consideration, so that good English and well-chosen expressions only shall be used. By means of the story his knowledge should be strengthened, his vocabulary enriched, his mind supplied with fresh, pure and bright images. He should be taught the unvarying relations of cause and effect, and incited to a true, pure and noble life.

In choosing stories, all those should be excluded that—

1. Tend to frighten little children.
2. Show them the dark side of life, or
3. Give them erroneous ideas.

Stories may be

1. Ideal, or purely imaginative. These are fairy tales, allegories and fables.
2. Realistic. Tales of domestic life, of adventure, of history, or of natural history.

In order to guide our choice wisely, it would be well to see what the characteristics of these two classes of stories should be.

Fairy tales should be :—

1. Calculated to raise the children above their present level.
2. Composed of healthful and bright images.
3. Such as exert mental activity to more acute perceptions.
4. Such as tend to broaden vision by giving new ideas.
5. Calculated to make the eye glisten, the cheek glow, and the limbs move with delight.

Realistic tales should be :—

1. True to life, i.e. without false sentiment.
2. Taken from that portion of life which belongs to childhood.
3. Such as tend to implant high principles.
4. Calculated to awaken interest in the world around, and enlist the child's sympathy on the side of animal creation.

Children revel in the old, old fairy stories : " Cinderella," " Red Riding Hood," " The Three Bears," " The Sleeping Beauty," and many others too numerous to mention. They love them, and will listen to them, and tell them over and over again with never-failing interest. No tale of good little Mary and Harry, who always did as they were bid, will ever excite in children that keen delight that a fairy tale, which has been the possession of children of all ages, can arouse. These form the basis of nursery classics and therefore of school classics. The beautiful stories of Hans Andersen, those written by the brothers Grimm, allegories and fables come next in favour. Who can ever forget the impression made by the hearing or reading of " The Ugly Duckling," " The Little Mermaid," or " The Pea Blossom " in their childhood. Children have often been moved to tears by the first-mentioned story, and their delight in its climax is unbounded. Surely a beneficent influence must be felt when the child's heart beats with sympathy for the poor hapless creature or rejoices at its transformation.

But besides these there are many Nature myths and stories that all children love : Persephone's story, the stories of Hermes, Iris, Pandora, Phaeton, Baldur, Daphne, Narcissus, and many others. Then Lewis Carroll's books, *Alice in Wonderland* and *Through the Looking Glass*, both of which need very careful telling, but are listened to most eagerly when well told ; Kingsley's *Water Babies*, which we took with great success last year with our seven-year-olds ; and the story of Hiawatha, which was also taken with the same

class. The last-mentioned stories each occupied some weeks, but the children's interest increased rather than diminished as the time went on.

With regard to realistic tales, animal stories, tales of heroic deeds, historical events, and true tales of every-day life are abundant. Only selection is needed. "Is it true?" is a question that children frequently ask, and their pleasure always seems to be increased considerably if one can answer in the affirmative.

Kipling's *Jungle Book* and *Just So Stories*, together with Uncle Remus and his tales of Brer Fox and Brer Rabbit, are listened to most eagerly. People who do not advocate the inclusion of fairy tales in an ordinary school curriculum should read a book lately brought out by Miss Catharine Dodd, of Manchester University, entitled *Nature Studies and Fairy Tales*. She shows very plainly and effectively the value of fairy tales as an educational instrument, and, making them the basis of her work, she shows too what is their proper relation to Nature study and other subjects of school curriculum. The hints on nature teaching and the preparation of lessons are very valuable. As Mr. Scott Coward says in the preface, "The book will doubtless receive the serious consideration and attention it deserves, and will fill a place at present vacant in the sphere of infant teaching." It should be in the library of every teacher of little children.

Different kinds of stories are required at various periods of a child's life. The tiny tots of three are very different people to cater for in this respect. Picture talks are much more suitable for them, with just a little story on what they can actually see for themselves in the picture. And these talks and stories should invariably be about children and animals. The child is essentially a living, moving being, and nothing at this age can interest him as much as that which also has the faculties of life and movement. Description has no charm for him; still life is non-existent. The kitten playing with a ball, the bird flying on swift wing from tree to tree, the bee murmuring all day among the clover, the fish with its wonderfully flexible body, turning and twisting this way and that: those are the subjects that will attract and enchant his attention. Let him watch them, and while he watches tell him simple little stories that will give him a pure and reverent love for these creatures, with whose never-ceasing movements his own restless little body and soul have such secret sympathy. If you cannot have actual animals for your children to observe then you must provide them with models and pictures. Both are advisable, but of course the model is the more necessary item, as being (if well made) most true to life. Picture books, with large coloured pictures, are excellent to use in the story lesson, and if the children can suggest the story told by the picture so much the better. At any rate, children should always be encouraged to re-tell stories in their own words.

This should be done in every class. We want our children to talk in paragraphs, not merely in sentences; to *converse* with us, not repeat phrases previously heard in parrot fashion. And as a means to this end we try to get them to re-tell the stories, helping them out here and there, and (this is a very important point) checking laughter among the class at errors or curious expressions on the part of the narrator. Children are very sensitive to ridicule, and you will find that once a child has been ridiculed by his class-mates when telling a story it will be a long time before he will attempt to do so again, unless you can, by means of your ready tact and sympathy, make him join in the laugh against himself and encourage him to try once more.

It is much more easy to provide tales for children of four and five. Their experience is considerably wider. But here, too, and indeed all the way through child life, other children's sayings and doings are of paramount interest, and next come animal stories. Pictures are very helpful here, especially in stimulating the child to take *his* share, but they are not nearly as necessary. The child's increased knowledge and ever-growing and enriched imagination helps him at this age to pourtray the scenes and situations, which you describe in such graphic and glowing terms, to himself. He is not nearly so dependent upon pictorial representation as he was a year or so ago.

Not many stories I have mentioned in the following suggestive list are suitable for these children of five and under. A book entitled *In the Child's World* (see last chapter) gives excellent stories to be used for children of this age. Such magazines as *Chatterbox, Sunday, The Children's Friend, Father Tuck's Annual, Our Darlings*, etc., abound with anecdotes of child and animal life.

It is when the child reaches the age of six to eight that we can provide him with such a veritable feast and such unbounded variety, and it is for these children that the list I have sketched is most suitable. At this period begins the heroic age, the age when the child requires a hero gallant and bold; when he loves and craves for stirring scenes, hairbreadth escapes and dangers. This is the time when we introduce him to King Alfred the great and good, Nelson the brave and noble. The stories of Ulysses, of Perseus, of Hercules will thrill him through and through; he will go to the Crusades with Cœur de Lion, he will brave the peasant army with Richard II, and go out with Grace Darling into the black and stormy night to the rescue of the perishing sailors. Let us be sure that the heroes we give to him are truly heroic. Knowing his power of imitation, let us set before him characters and deeds worthy of imitation, that his mind may be stored with pure and worthy pictures, and his heart touched to words and actions of true nobility.

I do not pretend to have given anything like an exhaustive list. It is

intended to be merely suggestive. No doubt many others will suggest themselves, and one only needs to try them by the aforementioned tests to decide for or against their suitability.

Most of the fairy tales I have mentioned are from Hans Andersen's Danish Tales. They are much more suitable for little children than those of the brothers Grimm. The latter are often so bloodthirsty, and describe such terrifying and revolting situations, that they need to be postponed to a later period when the child's powers of discrimination are better developed. Some of them may be used by means of careful selection and adaptation.

Children of this age may be told Nature stories so called—the legends of the various flowers and trees, such as Narcissus and Echo, Hyacinthus, Myosotis, Daphne, etc.; legends of the sun, moon, stars, rain, wind, etc., such as the stories of Phaeton, Iris, Hermes, etc.

Mrs. Ewing's and Mrs. Gatty's books are most suitable. I remember being perfectly fascinated as a child of six or thereabouts by the story of *Daddy Darwin's Dovecot*, and one of the most vivid pictures in my mind then and now is that of the small boy, standing inside those bare high walls, gazing eagerly, longingly up into the blue sky, where, far above his head, the pigeons are tumbling and turning, those blissful creatures which have the freedom for which he so greatly longs.

Suggestive List of Stories

Stories from English History.

King Alfred and the Cakes.
Canute.
The Black Prince.
Hereward the Wake.
Cœur de Lion.
Richard II and the Peasants.
Queen Elizabeth.
The Royal Oak.
The Pilgrim Fathers.
Stories of Queen Victoria.

Stories from British History.

The Venerable Bede.
Agil the Archer.
King Havelock.

Women and Men of Note.

Joan of Arc.
Florence Nightingale.
Queen Eleanor.
Grace Darling.
Stephenson and George Watt.
Columbus.
George Washington.
Nelson.

LITTLE BASKET MAKERS

Legends, Sagas, etc.

Stories from Ovid.
The Adventures of Ulysses.
Stories from the *Iliad*.
Stories from the *Æneid*.
The Knights of the Round Table.
The Seven Champions of Christendom.
The Story of Thor.
The Story of King Lear.
The Legend of St. Christopher.
A Legend of the Great Dipper.
Heroes of Asgard.
Kingsley's *Heroes*.

Fairy Tales.

The Three Bears.
Cinderella.
Red Ridinghood.
The Sleeping Beauty.
Beauty and the Beast.
Snow White and Rose Red.
The White Cat.
The Frog Prince.
The Ugly Duckling.
The Pea Blossom.
Little Tiny.
The Little Tin Soldier.
Little Ida's Flowers.
The Story of the Year.
The Silver Shilling.
The Daisy.
The Fir Tree.
The Wild Swans.
The Metal Pig.
The Apple Tree Branch.
Jack and the Beanstalk.

Mrs. Ewing's *Stories for Children*.
Mrs. Gatty's *Parables from Nature* (selected and adapted).
Stories from *Æsop's Fables*.
Stories from *Jungle Books* (by Kipling).
Stories from *Just So Stories* (by Kipling).
Ruskin's *King of the Golden River*.
Stead's *Books for the Bairns*.

Tales from the Poets.

The Birds of Killingworth (Longfellow).
The Bell of Atri (Longfellow).
Stories from "Hiawatha," especially—
(1) Hiawatha's Childhood (Longfellow).
(2) „ Fasting (Longfellow).
(3) „ Sailing (Longfellow).
(4) „ Fishing (Longfellow).
(5) The Son of the Evening Star (Longfellow).
The Legend Beautiful (Longfellow).
Rhœcus (Lowell).
The Vision of Sir Launfal. (Lowell).
The Idle Shepherd Boys (Wordsworth).
The Blind Highland Boy (Wordsworth).
The Waterfall and the Eglantine (Wordsworth).
Tales from Chaucer's *Canterbury Tales*.
Tales from Spenser's *Fairie Queen*.
Pied Piper of Hamelin (R. Browning).
Story of Cordelia (Shakespeare).

There is a charming book of stories, with a still more charming preface, which was published a few years ago by two genuine child-lovers. I refer to *The Story Hour*, by Kate Douglas Wiggin and Nora A. Smith. I cannot conclude these few remarks on "stories" in a more fitting manner than by giving a quotation from the preface.

"If you have no children of your own, dear Person with a Story, go into the highways and byways and gather together the little ones whose mothers' lips are dumb: sealed by dull poverty, hard work, and constant life in atmospheres where graceful fancies are blighted as soon as they are born. There is no fireside and no chimney-corner in these crowded tenements. There is no silver-haired grandsire full of years and wisdom, with memory that runs back to the good old times that are no more. There is no cheerful grandame with pocket full of goodies, and a store of dear old reminiscences all beginning with that enchanted phrase, 'When I was a little girl.' Brighten these sordid lives a little with your pretty thoughts, your lovely imaginations, your tender pictures. Speak to them simply, for their minds grope feebly in the dim twilight of their restricted lives. The old, old stories will do; stories of love and heroism and sacrifice; of faith and courage and fidelity. Kindle in tired hearts a gentler thought of life; open the eyes that see not, and the ears that hear not: interpret to them something of the beauty that has been revealed to you. You do not need talent, only sympathy, 'the one poor word that includes all our best insight and our best love.'"

* * * * *

Recitations.—It will be noticed that a great number of recitations are included in the schemes of work, and some people may wonder how the children are to learn them all. But they are not primarily meant to be learned by the children. They may learn one or two in full, but the majority of the recitations are meant to be recited by the teacher, with perhaps a few lines containing the pith of the matter, committed to memory by the class. In this way the children are introduced to literature, their vocabularies are enormously increased, and their ears cultivated to appreciate the music and rhythm of poetry. Of course, every piece recited by the teacher is accompanied by a conversation, in which the meaning of difficult phrases and words is discussed, and the children led to retell the story in their own words. In this way the recitation becomes an invaluable sidelight on the subject in hand, even if it answers no other purpose.

But with regard to lines committed to memory by the children, whether they be four or forty in number, the same rules must be attended to. From the very first attempt, from the very first word, clearness of enunciation, and modulation of the voice to produce the correct expression, must be insisted

upon. The teacher herself must recite well, and be able to make the children imitate her, or the chief aim of the lesson will be lost. Breathing and voice production will demand special attention, and it will be found that the reading and singing will both be improved when recitation is a carefully and intelligently taught subject.

Besides those recitations I have mentioned in the schemes of work, which are for the most part quite simple and easily understood by the children, there are many others by our best poets that may be used, if used judiciously. Wordsworth's poems, "To the Lesser Celandine," "To the Daisy," "Foresight," "The Coronet of Snowdrops," "To a Skylark," and those beautiful and well-loved lines beginning, "I wandered lonely as a cloud," are all such as may be introduced with benefit to children of six, seven, and eight, if recited to them by the teacher.

Longfellow's "Birds of Killingworth," "The Bell of Atri," and Lowell's "Rhœcus" are among others that we have used in the recitation lesson as well as in the story hour.

Of course there are many words and expressions occurring in these selected poems that the children will never have heard before, but it is surprising how soon they will arrive at their meaning from the context if the piece is recited to them in an intelligent and sympathetic way. Children are very quick to feel; their powers of intuition are very strong. Any one knows this who has tried to look severe at a small boy, while feeling intensely amused at his escapade. He watches you most keenly for the first sign of a smile, and as soon as he sees it a look of relief spreads over his features, as he knows his worst fears will not be realized. Children's intuitive powers are mostly to be trusted. It almost seems that they possess them to be their safeguard in place of that intelligence and knowledge which is a later development. It is this intuition which helps them to realize the meaning of a poem—from the very expression on your face, from the tone of your voice. Any one who has tried this plan of reciting to children, and questioning them about the subject matter, cannot fail to be both amused and interested at their guessings at truth, nearly all of which hit the mark more or less accurately. We had an amusing example of the opposite of this a day or so ago. The expression was, "In the moonlit cavern stowed." When asked what a cavern was, one bright boy answered, "A kind of shop." It is easy to see what word was in his mind. Another child said "stowed" meant "A little animal like a frog." But such answers are the exception, not the rule.

Our children love these recitations, and their questions are most eager and interesting—not to say puzzling sometimes. I remember being rather puzzled last year by one of these searching questions. In one of our reading lessons the expression occurred, "The cold grey light of early dawn," and a

little boy looked up at me with frowning brows, as he said, "What's a cold, grey light like? *I've* never seen one." I am sure you will agree with me that it was not a very simple question to answer. I hope I did it to his satisfaction. Well! if children learn to ask intelligent questions about things they do not understand, a great battle is gained, even if some little time is taken up in explanation. I am sure that in the present day many children, especially the elder ones, read and learn passages where words and expressions occur which they do not understand in the least, without ever dreaming to ask the meaning. Anything is better than that, for you cannot find out, except by means of individual questioning, how much they do understand. How much better it is when the child feels that he cannot proceed with any satisfaction until his difficulty has been successfully met with. A habit of this kind is invaluable all through life; it forms the basis of the best kind of scientific mind, and develops and strengthens the child's reasoning powers and his ideas of rectitude. He learns the sacredness of language, and acquires a reverence for the spoken and written word as a symbol of something very real. So this habit of questioning, of legitimate curiosity in the child is the basis of a strong, firm character which investigates truth before he accepts it as such.

CHAPTER VIII

PHYSICAL EDUCATION AND HYGIENE: SONGS, GAMES, AND DRILL

Songs and Games.—Children love to sing. It seems their natural mode of expression when happy. A contented baby croons to himself as he plays with his toys on the floor, and little children in school often softly hum and sing to themselves as they build or lay their sticks in position, or do any other simple thing that does not require strenuous thought. And any régime for small children which does not give a good proportion of time to songs, games and finger plays is one to be condemned because it neglects to comply with the express necessities of the child. With little ones of three or four, every lesson in the day should be followed by a little song or a finger-play, in which their restless little limbs may be moved for a few minutes. When children are very fidgety, it is often advisable to let them stand and have a bright action song or a few physical exercises. This allows them to "throw off steam," as the expression goes. Then having had the physical exertion demanded by their bodies, they will be ready to sit the more still. But apart from this, every child of five and under should have half an hour in the day for organized games, and at least half an hour for singing, action songs, and finger plays. The half-hour for singing is best split up to come between lessons. Our own time-table allows :—

Standard	I.	130	minutes	per	week,	singing.	
Class	I.	160	,,	,,	singing	and	games.
Class	II.	240	,,	,,	,,	,,	
Class	III.	340	,,	,,	,,	,,	
Babies		340	,,	,,	,,	,,	

We do not find this a bit too much. Tonic Sol-Fa is taken from and including Class II upwards.

Music is an important factor in the school and in the Kindergarten. It trains the voice and stimulates activity. It is a great aid to keeping order, and is a pleasant variation in school routine. But songs should be carefully chosen. Children's minds and voices are only fit for what is simple and clear ;

the tune, compass and intervals must all be considered. Tunes should be melodious, harmonious, and flowing, and containing easy intervals. Songs for children under five should keep within a compass of six or seven notes, while those for children under eight might range from eight to ten notes, but the upper D or E♭ should generally be the limit.

Games form a characteristic feature of the Froebelian system. Play is the spontaneous activity of the child, and games may be so guided and developed that they become of great educational value. Self-discipline and consideration for others form one outcome of games played in a right spirit. The child learns that he is one of a community, and the claims of each member of the community to take an active part is of just as much importance as his own claim. Games are also of value for intellectual teaching; the child learns fresh facts about the world around him. Physical development receives strong aid in exercise of the muscles. The kind of exercise contained in these games is just of the kind needed by the child at this stage: gentle, constant exercise of the muscles of hand, arm, leg, and the body as a whole. The imitative faculty is called into play by means of the dramatic action required. So we see that games supply opportunity for self-discipline, intellectual training, ethical teaching, physical development and training of the imitative faculty.

Games should be played out of doors in suitable weather, and in the central hall when the weather is not favourable. In many schools the central hall is not nearly sufficiently used, and often not used for the right purposes. Games must not be played in it "because the noise disturbs the older children." Our own hall is in use all day long, and for two hours every day, and sometimes more, singing and games are being conducted in it by various classes. Being a daily occurrence it makes no difference to the work of the school. In fact, every day games are being played by one of the two lower classes while reading is going on in the three upper ones. Once the children get used to it they take absolutely no notice. It seems a great pity that these beautiful central halls, which are so admirably adapted for the purpose, should not be used for games *daily* by every class in the infant school. And if the "noise" is the primary objection raised, it only remains to dispel that objection by trial. Of course when it is quite a new departure from the order of things—an absolute innovation—you must expect a little curiosity and inattention on the part of the children, but it is surprising how soon they get used to it and take no notice.

The hall should also be used as a playground for the younger children during playtime in the winter. They cannot get sufficient exercise in their classrooms, but if turned loose in the hall while the other children are in the playground, it will be to the advantage of both teachers and children. The

doors and windows should be wide open so as to thoroughly change the air right through the school, but the little ones will take no harm if they are running about and amusing themselves. On mild days it is better to send them into the playground for ten or fifteen minutes, but in cold weather it is really cruel to insist on it. They leave the warm classroom and go out, often to stand about listlessly in the raw air, and come in looking blue with the cold. Colds and coughs among the children can often be prevented by a little care of this sort. The elder children should always go out, except when it is raining. In the winter it should be made a rule that caps *and* coats must be put on, and the teachers should make it their business to see that all the children run about. They should be encouraged to bring hoops and skipping ropes. Reins can be knitted in school, others can be made from red braid, and those who have nothing to play with should have dancing and running games in rings. *No* child should be allowed to stand still. If not well enough to play, he should stay in his classroom or go into the hall with the little ones. A detachment of teachers should always be in the playground during playtime to superintend. Many grave offences may be thus prevented.

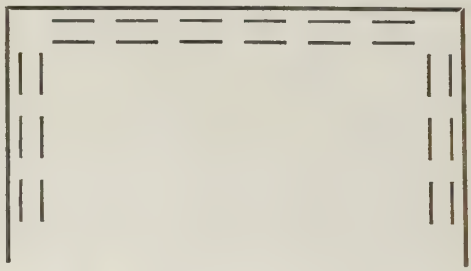
For this purpose it is a good plan to divide the staff in half, one division being responsible for the mornings and one for the afternoons. If teachers are made personally responsible, not only for the good behaviour but also for the amusing of the children during the short recreation period, there need be no notes from the better-class parents, to ask that Tommy or Mary shall not be allowed in the playground. I know from personal experience it is the playground that these people fear for their little ones, and it is, alas ! only too true, that the playground may be the nursery of many bad habits, where the seed of evil may be sown—seed which may bear fruit undreamed of in after-life. I do not say that the teachers should actually play with the children. That should be left to the individual entirely. But while walking round and getting their own recreation chatting to one another, they can see that the children *are* playing, help them to form rings, introduce a new child to a likely playmate, etc. All these little things improve the tone of the playground.

Those schools which have a common or field close will find it a distinct advantage to let the children spend their playtime there in the summer. We found it a great boon last year. The children just rolled about or lay down in the grass, or picked the scanty white clover and daisies with evident enjoyment. Games were taken in the field all through the summer.

Kindergarten games find a place on the time table of very many infant schools to-day, but it does not follow that the children *play* games. They may sing them, they may do a few appropriate actions, but that is not all that a

Kindergarten game involved in the mind of Froebel, its originator; no, not by a very long way. The primary and indeed originating element in a game is certainly the spirit of play. There can be no true game without it. Truly in this connection, above all others, "the letter killeth but the spirit giveth life." I once heard a teacher give as her reason for not taking a certain most fascinating game, that "the children played too much." Is that possible? If children are not intended to play in the time allotted to games, it is nothing but a farce to put it on the time table. People may say, "I have no central hall, I cannot take games." That seems an overwhelming argument, and I confess it is difficult in cold and wet weather. But there is always the playground. During most of the year games can be taken there. Even in fairly cold weather normally strong children can come to no harm if they put on their caps and coats, and are in constant movement. Of course you cannot have the piano, and the games do not make such a good show. But what of that? Such things are very minor considerations.

In many classrooms it is quite possible, by means of careful arrangement, to give more floor space than is usually available. Floor space is a great consideration, especially where there is no central hall. Desks can often be pushed back during games. The best arrangement of seats in the rooms occupied by children under five is in three sides of a square. Then the middle space is available for games. This can only be done where the floors are flat, as they should be in schools for young children.



On the subject of the actual playing of games much might be said, much has been said. Every one who wants to thoroughly understand the underlying ideas should read Froebel's own writing on the subject, and also *The Child and Child Nature* by the Baroness Marenholtz-Bülow. It is the underlying ideas which decide how the game shall be played. The first is certainly spontaneity. The child's actions must be spontaneous, self-originated. Considered from this fundamentally important point of view, one sees at once that it is entirely

SWEDISH DRILL.

against the law of spontaneity to *tell* children how to play a game. They should tell you how they think it ought to be played, and play it accordingly. One frequently hears such directions as the following: "Now we're going to play 'Come, Little Leaves.' Frank, you stand over there and be a tree. Hold your arms above your head and wave them about like the branches. Now, Ernie, you shall be the wind, and you must run round and blow hard." Where does the spontaneity of the children have a place in such a directed game as that? No, the children themselves must direct their own games, *they* must say what form the dramatization must take, or the games will fail of their primary aim and use.

The other day I was watching a class of five-year-olds taking "The Lamplighter" game for the first time, and it was most interesting to hear their suggestions as to the best way of making a lamp, how to show the lamp lit, how to put it out, etc. The teacher made no attempt to foist her ideas upon them. She took their suggestions and adopted the best. Only when the children cannot think of a way should the teacher come to the front with her own pre-conceived ideas, and then the children will feel that she is a real helpful playmate. The teacher should take an active part in the playing of the game, but not the part of directress of affairs. "What shall I be?" the true teacher says to her class, and they will soon find the most appropriate place for her. Sometimes they will decide that she shall sing it for them while they devote their whole energies to their play. This is a good plan to adopt in a particularly energetic game where there is a good deal of running about.

It is not at all necessary that there should be a thorough knowledge of the words before the game is played. Indeed, very often it is a good plan to play it first and learn the words afterwards. If it is sung through by the teacher beforehand, and discussed in class, that is all the preparation necessary for the first playing of the game. The words can be learnt by degrees afterwards, and if desired, some of the verses left out, so that only the most appropriate portions are committed to memory. It will be seen at once that if children play a fresh game almost every week they cannot memorize them all; indeed, it is not advisable to try.

The choice of games depends upon the season and the subject on hand. In the winter, Santa Claus games, and running, dancing and marching games are chosen most. In the spring we can play more Nature games in connection with the reawakening of the earth to life and sunshine. Games about the spring flowers, the returning birds building their nests, the tadpoles and frogs in the pond, the trees with their bursting buds, all these are suitable for springtide.

Then in summer we have the bees, the butterflies, and other inmates

of the insect world to watch and imitate in games ; the delights of the seaside, the haymaker and gardener to personate. In autumn we reap with the farmer's men, thresh with the threshers, grind the corn with the miller, make and deliver bread with the baker. We gather apples and pears in the orchard, and blackberries and nuts in the hedges. We scatter seeds with the wind and turn the sails of the windmill ; we store up nuts with the squirrel and dormouse, and return to the south with the swallow. And how real all this is to the children ! Only those who have *played* games with them can know. Their vivid imaginations can pourtray all things under the sun. Nothing is impossible, and it is charming to hear them make remarks in character. One day this autumn a class was engaged in playing at the falling leaves. At the close of the game two little leaves were noticed still clinging to the tree. The teacher remarked upon this, when a clear little voice said instantly in tones of reproach, " Why, of course they haven't. They haven't changed colour yet." Such remarks as these show how deeply children enter into games. *But* it is only when they are *played*, when the spontaneous activity of the children is the guiding principle and everything else subordinate to it. No elaborate apparatus is necessary, their fresh young minds can effect any transformation if you will only give them a free hand. Given the children and the subject, the game will soon unfold itself to the entire satisfaction of all concerned.

Some games are originated on the spur of the moment. The children have had a lesson on a certain subject which pleases them, and they say, " Can we play a game about it ? " Very often the teacher will say quite honestly (for they want to play games about such queer things), " I don't know a game about it. You must show me how to play it." And that is half the fun. After they have played it, the teacher may possibly be able to put words to it and find an appropriate tune. We have one very favourite game in school that came into existence that way.

People who have not tried games with their children may think that a large class playing in this way gets out of hand and unmanageable. If this is so it is the fault of the teacher. Children should be taught in everything to know when they are spoken to. At a given signal every child should be silent. If this is an understood thing it is quite easy to check them without any severity, should they show any signs of undue excitement or wilfulness. They quickly understand that order must be the primary rule of the game, and that for the good of the community individualism must sometimes stand aside. And this is an invaluable lesson in all states of society, and in all stages of life. " The greatest good of the greatest number " is a proverb that needs to be taken to heart by all, and surely it is a good thing to give our children elementary ideas of it, and opportunities to promote it.

Kindergarten games are of various kinds :—

1. Running, marching and dancing games.
2. Finger plays.
3. Imitation games.
4. Nature games.

The first two mentioned take the place of drill with the younger children. The only drill they get consists of the simplest head, arm and foot movements from Ling's Swedish system, and these only very occasionally as a change. This applies to the children of five and under.

The imitation games are very much enjoyed by all classes, because they provide a legitimate outlet for that strong imitative faculty which they all possess. They love to play at being carpenter, blacksmith, lamplighter, postman, milkman, greengrocer, or any other person with whose work they are acquainted, especially if accompanied by appropriate songs.

The Nature game is most valuable, leading the child to observe and imitate Nature's operations. By means of it he realizes his oneness with the world. Unconsciously he learns that he, together with the creatures and plants that he sees around him, form part of one great Divine scheme. This idea of unity in all things satisfies a great need within him, unrealized and unexpressed, but still there. He learns sympathy with all Nature—the birds, beasts and flowers become his little brothers and sisters, and he feels that his pleasure is adulterated if mingled with " the sorrow of the meanest thing that feels." Regarded from this point of view, we see what a very high and elevated part the Nature game may play if rightly directed. It helps the child to wisely adjust his relations to God and His creation. It gives him pure, holy, and generous impulses, and builds up a character which will be able to stand upright in the crises of life, because the wholesome, purifying winds of Nature will have swept over that child, making his eyes keen and clear to see and appreciate the right, strengthening his will to do the right. Thus he will be a child of Nature in the truest sense of the word, educated and trained by her who " never did betray the heart that loved her."

Drill.—With regard to actual drill, all the children of six and over get fifteen minutes' every day. Children of eight and under should never be drilled for more than fifteen to twenty minutes at a time. It has been proved by scientific investigation and actual measurements, that gymnastic exercises are most fatiguing. In this respect drill is bracketed with mathematics. Even in a short drilling lesson of fifteen minutes short periods of rest should alternate with periods of exertion, for the muscles of little children soon tire. Drill should never be taken in a close, stuffy room. If it cannot be taken in the open air, the best place is the central hall with doors and windows wide

open to allow a current of fresh air to pass freely through the room. If physical exercises have to be taken in the classroom, extra care should be taken to open doors and windows. During active exertion of the body the child requires a greater supply of oxygen, as the activity of the lungs is greatly increased. If the air is foul, the child is taking in an increased amount of poison every time he breathes. This is the first condition. The next is a good position. If children drill for a quarter of an hour a day, standing in a faulty position, a great deal of harm is done. And it is a simple matter and one that takes up but a small amount of time, to see that each child is standing correctly before the drilling commences. If the body is properly balanced at the start of the lesson, it has a good chance of remaining properly balanced. Another point that needs attention is the actual drilling of the teacher herself. I have seen the precision of a whole class deteriorate through the slackness of the teacher's movements. *Her* alacrity, *her* precision, *her* well-balanced, well-controlled body should be the model for the class. She has to show how the movements should be done, therefore it is of immense importance that she does them well.

Commands should always be given clearly and decisively, the same language being used invariably. If you always use precisely the same expression when you want a certain action performed, you are much more likely to get it done correctly than if you slightly vary that mode of expression. Children easily get confused. Again, commands should be given once, and once only ; this necessitates close attention on the part of the children, and trains their will power and obedience.

A good system of physical instruction is one that provides for the all-round development of the body, with special attention to the weaker parts. It is based on a true knowledge of anatomy, and makes possible the greatest degree of health. It is applicable to both sexes and to varying ages, producing the best results in the shortest time. Above all, it is a system in which the brain acquires full control of the body. Such a one is Ling's Swedish system. It answers to all these requirements in the fullest way. Each group of muscles is exercised in a recognized order. This is a very important point. Exercises are not chosen in any haphazard fashion, but they are linked together and follow naturally one after the other. So that it is essential that every teacher of Swedish drill should thoroughly master the order in which these groups occur.

Every exercise is performed to word of command. This exacts perfect attention on the part of the class, and is very valuable in strengthening the individual will. This also is the reason why drilling lessons should be short. While the body is being actively and rigidly exercised, the mind is also at a strain, and thus a double amount of energy is being expended. After drill

a lesson should follow which does not make any great demands upon the brain. Such a task as writing, drawing, needlework or Kindergarten occupation provides a beneficial change after the mental and physical strain of Swedish drill.

Another point which should receive attention is the clothing of the child. Anything tight hampers and restricts the movements, so that the child does not derive the fullest benefit from them. The top button of a growing boy's waistcoat is often tight, and stiff linen collars are an abomination. Our boys frequently take them off before drill, as the stiff edge hurts their necks in the head bendings. Coats which are tight and short in the sleeve should be taken off. It is better to have a "ragged regiment" than one whose movements are hampered by tight clothing. We cannot provide gymnasium costumes for our children, but we can at least see that the clothing they wear is as loose as possible to allow of the most perfect physical freedom.

Under-fed children should not be allowed to drill; it is positive cruelty, and if a child complains of pain when performing a particular exercise he should not be expected to do it. There may be some defect or disease which needs medical treatment and should be reported to the parents.

Besides Swedish drill, we take fan drill with the girls of six, seven and eight, and occasionally light dumb-bell drill with the boys of the same age. The fan drill is done to music, and consists mostly of graceful movements of arms and trunk, which are so beneficial to girls, and in which they take so much pleasure. If fan drill exercises were taken more in the upper schools, there would be fewer girls of slouching and ungainly carriage, whose tendency is to knock against and upset everything with which they come in contact. It is most productive of graceful movement.

But it is not only during drill and games that we make the physical welfare of the child a matter of primary importance. It has been one of the grave mistakes of the past to educate the mind at the expense of the body. As a natural reaction in some of our great public schools we are going to the other extreme as though our great aim were to turn out athletes. We want to find the *via media* in this as in all things. It is of the highest importance that as the State compels the child to attend school, the State should provide the healthiest possible conditions for him while he is there. For some of these conditions, architectural and sanitary especially, we are not responsible, but for others we are.

If every teacher would make it her business to attend to the elementary laws of health, and if every head teacher would make herself directly responsible for this, great benefit would accrue to the children.

Open windows, plenty of direct sunlight where possible, scrupulous cleanliness in the rooms, furniture, books and the persons and clothing of the

children--these are the things that will keep the little ones healthy and merry ; and last, but perhaps of greater importance than any, to children of tender age, habitual posture. It is not natural for children to sit in desks, but if they have to do so, the least we can do is to see that they adopt the correct position when in the desks, and also have plenty of opportunity for moving their bodies between lessons.

It is really most harmful to keep young children with immature frames, soft and yielding, sitting in desks for a great proportion of their time. Every doctor is agreed upon that. So it is our duty as teachers to make these conditions as healthful as possible, by teaching them to adopt a hygienic position.

I have already spoken of the correct position for writing. When reading, children should sit erect, with the book on the left hand, or held at the sides by both hands. They should sit well back in their seats, so that the back rest gives the fullest possible support. Books should never be less than a foot from the eyes. Feet should be placed firmly upon the ground.

When listening to lessons it is a good plan to let the children clasp their hands in their laps, interlacing the fingers ; they may clasp them loosely behind their backs sometimes for a change. If arms are folded, care should be taken that it is not done in such a way as to contract the chest. Deep-seated evils may result from this cramped position. The full expansion of the lungs is prevented, and the child's breathing capacity permanently reduced in this way. We cannot pay too much attention to details of this description, if we realize that it lies largely with us to mould the physical as well as the mental and moral side of the men and women of the next generation.

CHAPTER IX

DISCIPLINE

In the old days, under the old régime, when children in school were expected to behave according to the old adage, and be seen and not heard, it was a case, not of discipline, but of cast-iron military order and precision. If pleasing in a regiment of soldiers, it is the reverse in a school for young children. To see them sitting, each one the exact copy of his neighbour, rising simultaneously, speaking (on the rare occasions when they did speak) simultaneously, was surely not a pleasant or edifying sight. No individuality, no spontaneous effort, no initiative was allowed to them. But *nous avons changé tout cela.* We have recognized that to train the mind at the expense of the body is criminal ; that to produce mere imitation in the place of spontaneity is to deform the child ; that to destroy his individuality and powers of initiative is to deprive him of a priceless possession that we cannot restore to him. Upon the recognition and realization of this great principle depend our ideas of the meaning of discipline.

Formerly the child was governed entirely by a will outside his own. His individuality and will were over-ruled and crushed by the commands of the teacher. Self-government was impossible. The child was a mere little machine working to order, turning out work of a set pattern. His actions were the outcome of commands which came to him from without, and he had no chance to be himself and obey his own dictates for one single instant in the day.

Now we have recognized that the best form of control is *self*-control. When the government is from an outside source, directly that governing force is removed there is no government. When the child's actions are controlled from within, his source of government is never absent. I have heard people from various schools complain that on the occasions when there are visitors, inspectorial or otherwise, the children take advantage and behave badly, because they know that they will not be punished. In other schools, on the contrary, the children never show to such advantage as they do when visitors are present. The first case shows an obvious example of government from without. The children cannot be threatened or punished in the presence of visitors, and so in the absence of this usual coercion they behave

badly. In the second case the children are to a large extent self-controlled. They are not used to threats, and they feel that the credit of the school rests upon their shoulders. Consequently they rise to the occasion, and show themselves at their very best. In many cases children are good in school because they are afraid to be anything else. What we should endeavour to do is to get them to be good without the question of fear entering into it at all. So much, too, depends upon what we mean by "goodness" in children. Generally it means the non-infringement of school laws, and children are more frequently punished for such acts as fidgeting and talking than they are for lying or cruelty. This is placing the laws which hold good merely during school-life above those greater laws which are for our guidance throughout the whole of our lives.

To fidget and to talk are childish habits and necessities. The wriggling is only the obedience of the child's body to its natural law, which is growth through movement, and if more opportunities were given for this free movement of the limbs, so necessary to the growing child, there would be less complaints of fidgetiness. So that there must be time allowed between lessons for the stretching of little arms and legs which have been cramped through sitting in desks; then when the time comes for the children to give their whole attention to the work on hand, they will be more ready to do so than if that spell of physical movement had not been given them. That is one point which makes for good discipline.

Not only must the child's body have a certain time of movement and freedom during his day in school, but his mind also must at certain periods be set free from all restraint. He must be at liberty to go his own way, and amuse himself. In order that this may be done, "free time" is introduced into the time table. Soon after we started it in this school, a little boy of five looked brightly up at his teacher and said, "Is it do-as-you-like time?" It was such a happy phrase that it has been universally adopted since. The preparation for this lesson is very simple. Clay, bricks, pencils, crayons and paper, chalk and rubber, dolls, picture books, scissors, etc., are put out upon the table, and the children come out quickly, eight or so at a time, and take what they want, or ask for a thing if they do not see it. When they are all settled, the teacher either repairs to her desk to write up notes, etc., or walks round talking to the individual children. It is a perfectly charming sight to see a class of forty children in "do-as-you-like" time. They are very good, utterly intent upon what they are doing. Usually a rule is made to the effect that what you choose you must keep for the half-hour, unless your seat-mate is willing to exchange with you. There is never any need for interference on the part of the teacher, for the children never quarrel over their toys, and never complain of one another. They chat quietly to each other or to their teacher

CHILDREN'S WORK BRUSHWORK.

over what they are doing, and busily employ themselves working under their own guidance. " Do-as-you-like " time is another invaluable aid to the teacher in the study of the individual children under her care. Their real traits of character show up then, when no artificial restraint is put upon them.

Sometimes mere toys, such as dolls, cards and picture books, are excluded from the apparatus, and every child is expected to *make* something in his free time, though the object is left entirely to his own choice. It is surprising to see how often the children choose to do something in connection with their week's work. Not infrequently it is something which has not struck you. This shows that they do see, however dimly, that the work of each week forms an organized whole. This is a distinct advantage, for they will often delightedly anticipate a lesson that you are about to take. Naturally, having done so, they will take much greater pleasure in it as being their own suggestion.

I have mentioned cards and picture books as among the apparatus for free time. The cards are Christmas cards of past years, begged from friends who have no further use for them. The children are very pleased to have a few of these to look at. They arrange them on the desk in rows, and invent little stories about them for the benefit of their seat-mate. Of course, only a certain kind of card is of use for this purpose.

The picture books are mostly home-made. True, we have a few large picture books, but most of them are just brown paper drawing books at a penny each, filled with brightly-coloured pictures and scraps. Christmas cards are useful in this connection, too, if the appropriate portion is cut out and gummed. Advertisements and other pictures from discarded magazines, pictures from old reading books, all are useful for this purpose. And they are as nice in the children's eyes, these homely little brown paper books, as the finest scrap album that money can buy. Old picture postcards can be used up in this way.

Free time may seem to some people wasted time. That is before they try it. Once it is part of the week's programme they will speak of it in different terms. Coming as it does towards the end of the afternoon's work, when neither teachers nor children are most fresh, it is a boon. Not only so, but the opportunity for the exercise of the child's creative power is invaluable. He is employed in doing something, in working out something which has originated in his own brain. He learns by doing, and both brain and hand are strengthened by the act. During this brief space his individuality, unhampered by any restraint, makes great strides in self-assertion, and is consequently deepened. Free time also gives boundless opportunities for character-forming. There are so many openings for unselfishness, sweet temper, gentleness, courtesy and patience. When we consider that the infant school

is *the* place for the formation of such habits, we can only wonder that we have not introduced " Do-as-you-like time " before. I think I am not wrong in speaking of free time in a chapter on discipline, though at first sight it may seem irrelevant. Viewed from the physiological standpoint, with its unavoidably close connection with the psychological, we can quickly see that this freedom is very pertinent to the question of discipline ; that is why I have put it first.

Another good rule is—keep the children well employed. Every practical teacher knows that it is not while an actual lesson is going on that there is trouble, but between whiles. While children are actively employed they are good. It is when apparatus is being given out or collected, when there is a gap between one lesson and the next, that they begin to fidget and chat. It is idleness that is the opportunity of naughtiness. If children are busy they have neither thought nor time for mischief. But the task upon which they are employed must make a definite demand upon their powers. Nothing that is easy to them will keep their attention long, especially in the case of the older children, and their active minds and eyes will at once be roving in search of " pastures new." So the practical outcome of this knowledge will be to have everything as ready to hand as possible, so that there is always something or other for the children to do to keep them out of mischief.

Then, too, their interest must be aroused. If you can create and retain their interest, you will have no trouble with inattention. If you can stimulate their ambition and self-respect, and make them believe in themselves and their infinite capacity for producing good work, you will get good work from them.

Of course I am speaking of the average child, not the difficult ones of which there are always a sprinkling, and which always need to be individually studied before one can legislate on the subject. There is the child who cannot bear that any one should receive more notice than himself, and who turns sulky if one child's work is praised and his ignored. There is the child who flies into a violent temper immediately he is crossed. There is the stubborn child, the impudent child, and many more. Each one has to be considered separately and treated differently. But whatever treatment is adopted, it should have this aim, not only to stop his bad behaviour at the time, but to make him see his fault in its true light, and train him to grow out of it by degrees. The aim of all punishment is not only correction of a fault, but prevention of its further occurrence. With these difficult children it is a great thing to be able to avoid all occasion of error. If we know a child to have a hasty temper, we shall do all in our power to avoid any opportunity for his exercising it, for every time it is exercised the stronger it grows. The same with a stubborn child. It is not unusual to meet with a child who

strongly resents being told to "come out" or "stand up," when he has committed some trifling offence, and you know that if you insist on his doing it you will have a battle royal for some ten minutes or so, waste everybody's time, and perhaps run the risk of being defied by the boy, to say nothing of the risk of losing your temper. It is not worth it. It is much better to be judiciously blind to his fault, than to run all these risks and strengthen his bad habit. I am speaking now of *minor* peccadilloes. Judicious blindness is a great thing. If you notice and remark upon every little fault, what are you going to do when the big faults occur? I hope I shall not be misunderstood when I advocate occasional judicious blindness. You cannot let the same wrong act go repeatedly unchecked, but at times it is wise to let a child think you have not observed him, especially when it happens to be a habitually good child.

The great thing is to *believe* in the child, not only in his capacity for good work, but for good behaviour too. Trust him, and he will in nine cases out of ten prove trustworthy. Suspicion breeds deceit and falsehood, and it is only by thinking the best of our children, and showing them that we think it, that we can hope to attain the highest ideals of conduct in them. And in connection with this there are many little highly-valued privileges that we can give to our children. They dearly love to be useful, and a system of helpers is productive of the best results. Sometimes we give these privileges to the best children, but often we give them to the troublesome ones, in the hope that the honour and responsibility will make them more self-respecting and good. Rewards and punishments take this shape; the former is the conferring of a privilege, the latter is the deprivation of such privileges, and it works exceedingly well in most cases. There is nothing a child loves better than to be able to enter school and remain in school before and after lessons begin. Such a child feels a person of importance, and behaves accordingly. Such a privilege is conferred upon the monitors for the various classes. They are allowed to put things ready before school, and to help clear away when school is over. Children who fill positions of trust feel not only important but responsible, and that responsibility ensures their good behaviour in nine cases out of ten. This is a reason for making a troublesome child fill such an office. It often acts as a corrective and incentive, when every other method of coercion has failed.

But all rewards and punishments must be based upon a knowledge of the character of the individual child. What is effectual with one child makes no impression upon another, and so it is impossible to lay down any hard and fast rules on the subject. One thing is certain. Punishments ought never to be inflicted in a spirit of anger or resentment. Such a punishment deserves to fail, for its aim is the satisfaction of the teacher's personal feeling, and not

the correction of the child. Reflection and cool deliberation are necessary before the right and sensible course can be decided upon. If you are angry and annoyed, you are biassed, and are therefore incapable of an unprejudiced judgment upon the conduct of the child. If the child sees you are angry and resentful, he instinctively feels that you are taking a personal revenge upon him, and the effect is lost.

Another thing to bear in mind is the fact that the class reflects the teacher. Every practical teacher knows that. Indulgence in a spirit of irritability, when every little thing rubs one up the wrong way, is certain to produce the same thing in the class, and good work and behaviour are impossible. On the other hand, a calm, smiling, good-tempered teacher will smooth out all the ruffles of irritability in her children, and create an atmosphere of peace and order. Above all, *don't fuss*. Fussiness is fatal in school life. There is nothing equal to it for making little children restless and fussy too. There will be whisperings, wrigglings and fidgetings innumerable in the classroom where such a person rules. I know it is difficult to keep perfectly cool and sweet, especially on hot summer days with the thermometer at 70° to 80° in the rooms, and the children hot, sticky, and ready to quarrel with their own shadows on the slightest provocation. But depend upon it, it is to your own advantage after all to "smooth out the creases" and "oil the wheels" with a smile and a cheery word.

We all know what it is to pass from one room to another in a school and feel the difference in the tone. What is the cause of this difference? The rooms are very much the same size, with the same system of lighting, warming and ventilation, the children are much the same age, are doing much the same work, and yet, what a vast difference between one room and another! Here there is peace, order, good temper, good work; there, on the contrary, is an atmosphere of unrest, of strife almost. The children are like the waves of the sea for restlessness; there is constant movement, murmuring and whispering; cloudy faces and tears are to be seen all round. "What is the cause of the difference?" you ask, and the answer is ever the same—the teacher. Human nature, child nature, is much the same everywhere, and under the fostering hand of the teacher it blossoms and bears fruit. But if that hand is a rude and careless one, a negligent and ignorant one, the child's nature cannot come to full and perfect fruition. Its good intentions are turned aside. Like a plant in the hands of a careless gardener, its young and tender shoots and buds, so timidly put out, are nipped by the frost of a cold and harsh manner, or withered by a sneer or unmerited rebuke. A snub is fatal over and over again to the child's timid effort. Better to be over-encouraging than to give no encouragement at all, or worse still to be a wet blanket to his aspirations.

All this is very pertinent to the subject of school discipline. It is this atmosphere of sunshine, peace, harmony and love that is so potent where little children are concerned, and in such an atmosphere alone can we hope to develop character to its highest issues. The behaviour of a person, his conduct, as we call it, depends upon his character, and it is as a character-forming agent, working next to the mother, that the personality of the teacher is of the highest value. Sometimes we are apt to lose sight of this, and to think chiefly of the work of teaching the child, instead of putting it side by side with the work of training, which is of infinitely higher importance. Viewed from this standpoint, it is the teacher's personal character, more than her qualifications, that has the greatest influence over the child's school life. Is she patient, gentle, impartial, loving, true in every thought, as well as in deed and word ? Is she worthy of imitation by her little scholars ? If so,

"We needs must love the highest when we see it,"

and her shining example will help them more than words can say.

On the contrary, what chance have the most eloquent moral and Scriptural lessons from her lips, when her daily words and actions belie that very gentleness, courtesy, patience and truth which she would fain impart.

What a power is courtesy in producing the same considerateness and gentle behaviour among children ! It is of great importance to speak kindly and courteously when addressing them. So only can you hope to make them act similarly towards each other. If our dealings with them and before them do not savour of that absolute directness and truthfulness of which we frequently speak to them, how can it be expected that their words and actions will bear the stamp of truth ? And so it is in everything. What we are, they will endeavour to be. If they were only conscious of it, they might say to us like Browning's lover in "A Lover's Quarrel" :—

"If you knew the light
That your soul casts in my sight:
How I look to you
For the pure and the true
And the beauteous and the right."

Ah ! did we but know, or rather did we but realize it, for we do know it, should we not make an effort for the sake of these little ones, who look to us for so much ? Did we but remember more often the sacred charge of those plastic minds and hearts, should we not "daily endeavour ourselves to follow the blessed steps of His most holy life," that we might be more worthy of our holy and blessed office of teaching and training those same little ones "whose angels do always behold the face of My Father which is in heaven" ?

CHAPTER X

CHILDREN ADMITTED AT FIVE YEARS OF AGE

In schools where children are not admitted under the age of five, a different plan must be adopted from those already sketched in the previous chapters of this book. When children come to school between the ages of three and four, they get eighteen months to two years' valuable training, which those coming to school at five miss. That is, of course, in a school of the Kindergarten type, where the natural claims of the child himself are recognized as legitimate, and indeed imperative. Such a school will do no harm to the normal child of three or four, and on the other hand the training, especially hand and eye, and language training are very valuable. A child who starts school at the age of three and a half, has time to go through the Gifts and Occupations in a leisurely way, devoting a suitable time to each as it comes under his notice. But children under five should never attend a school where the building arrangements are insanitary, the rooms confined and small, the ventilation defective, and the accommodation limited. Light, fresh air and movement are essential for all children, especially infants of three and four, and no amount of good training can atone for such defects in a school. On the other hand, the building may be excellent in the way of accommodation, lighting and ventilation, but unless the methods of teaching are such as will help the child to develop naturally and intelligently, and not stultify all his faculties, he had much better remain at home until he is five, when his own personal character and individuality will have grown stronger, and better able to resist all influences, that would stunt his growth and development. But in many districts now, children under five are compulsorily excluded from the schools, and schemes must be modified to meet their requirements.

The child should still proceed in a logical manner through the sequence of Gifts and Occupations, but we must remember that the ones that come early in the series, are being presented to the child at a much later period than Froebel intended. For this reason they will be dealt with in a different manner, and discarded sooner. For instance, the baby of three finds plenty in Gifts I and II to amuse, instruct, train and educate him for some months. He will not exhaust the possibilities of Gift III for a year or more. But with the child of five it is different. His outlook is wider, his tastes more mature, his mind more capable of receiving and retaining impressions. He is physically stronger, and the simple plays with the ball, cube and cylinder, which are

so attractive to the baby mind, will soon pall upon him. Consequently, though we introduce him to the earlier gifts of Froebel, they do not occupy his attention for long, but after they have done their work of giving the child clear impressions of form and colour, and increasing his manual powers, they are put on one side, to make way for other materials and other plays more in keeping with his age and requirements, and therefore better fitted to develop his activities. In selecting the various gifts and occupations for a class of children beginning their school life at the age of five, we must consider these points, and choose accordingly.

Gift I should be the first presentation to the child, and when considering what occupations we shall link with it, we see at once, that those which deal with ball forms and circles will be most appropriate. So, during his first few weeks in school, we let him occupy part of his time with freearm drawing of the circle, and interesting objects connected with and derived from it, such as an orange, an apple, a clock face, etc. We encourage him to make balls of varying sizes in clay, and such simple objects as a nest, an apple, a cottage loaf, etc. Now cut a ball, made carefully by the teacher from the clay, into circular tablets, and having shown the derivation of the plane surface from the solid, provide the child with coloured circular tablets wherewith he may form designs. All these occupations—Gift I, freearm drawing, clay modelling and tablet-laying—can be inter-related to emphasize the form of the ball, which we are introducing to the child. They will provide him with ample material for the first month.

Then we come to Gift II, with its sphere, cube and cylinder. The impression of unity has been given with the first gift, now we give impressions of variety or manifoldness. Here the child receives his first fundamental lessons in form, and should be aided to recognize, that all form is based upon these three, and may be derived from them. It is a good plan to introduce lath and stick laying to the child before drawing. They form a kind of link between the planes and the lines. Before he tries to draw the face of the cube, he can make it with his laths or sticks. Many familiar objects may be made with a number of sticks of equal lengths. The short and long lines should be deferred until the child arrives at Gift IV, then with sticks of varying lengths his resources are much increased. Ring-laying may be combined with stick laying to make curved objects. The objects so made can then be drawn by the child, and he sees that drawing is stick laying made permanent. Now let him reproduce the sphere and the face of the cube on his freearm board. Only the face of the cube should be attempted at this stage, then familiar straight-lined objects, such as a window, a door and a house, encouraging each child to make his drawing as large as the board will permit. The drawing of the cylinder should not be attempted. The children are not yet sufficiently

educated, either to understand the meaning of such a drawing, or to show any accuracy in making it, therefore it should not be essayed. But it can be modelled without much difficulty, and all three forms should certainly be made in the clay, then objects formed from them. Most of the models made at this stage should be derived from the ball, but the children should have a little practice in making some, which are based upon the cube and cylinder. Tablet laying can be continued indefinitely, now that the cube has been introduced. The square tablet can be cut from the clay cube in the same manner that the circular tablet was cut from the ball. Then with coloured wooden or cardboard squares, designs may be made, first with the squares alone, then in connection with the circular tablets. In order to make the triangle, the square tablet of clay should be cut in two diagonally; this will give the right-angled isosceles triangle. This brings the child to the use of triangular tablets, first used alone, and then in conjunction with squares and circles, opening out almost illimitable possibilities to the child, and giving to the teacher multitudinous opportunities for the teaching of form. Towards the end of the year, *paper* tablets of various shapes may be supplied to the child, and with these he can make permanent designs, being allowed to paste them on to a background, which should be ruled in chequers of one inch for his guidance.

As soon as the child is acquainted with the cube, he should be presented with the first building gift—Gift III. Here he has the one form to deal with as a unit, but with eight of these units his resources are many. With this gift he should make as many *life* forms as possible, objects connected with his own home and school experience, objects connected with the stories he hears. This is an important point, for in tablet laying, form is so emphasized that the child might grow weary of it, and he needs something to counteract its formal influence. Therefore, in his drawing, modelling and building, life forms should be used as much as possible, being more suitable and acceptable to the child, than those of symmetrical and geometrical origin. Gift III meets two strongly marked tendencies in the child, tendencies which are very largely in evidence at the age of five. The love of investigation and transformation which he exhibits so markedly, should be met by us with the presentation of material, which permits and encourages the exercise of these two activities, and the building gifts provide the very material that we need. But Gift III, though so acceptable, will not long content him, and as soon as his fingers have acquired some dexterity in placing the cubes, he should be introduced to Gift IV. Here he again receives an impression of manifoldness. True he has still only eight units, each of which is precisely similar to all the rest, but while the faces of the cube are alike, the faces of the brick are widely different. This increases the difficulty of dictation, and teaches the child

discrimination, as he is now required to differentiate between the broad, the narrow and the short faces of the brick. The possibilities of Gift IV make it a large advance upon Gift III. A much greater space may be enclosed, and much greater height and length attained, than is possible with the cubes. The child also learns the necessity for perfect balance, and the law of transmitted motion. A careful and exhaustive study of Gift IV will show its enormously increased complexity, and consequent capacity for manipulation.

Thus so far we have given the child Gift I, II, III, IV, stick-laying, exercises in freearm drawing, clay modelling and tablet laying. These should be interspersed with a few colour lessons, as colour is only taught in Gift I, and slightly in tablet laying. No definite lessons are needed in form. These are abundantly provided for in the various lessons with the Gifts and Occupations.

Supposing that the school year begins after the summer holidays, the first term will end at Christmas, and so far, I have sketched sufficient and suitable work for the child during his first term in school. I always think it fortunate, that the majority of schools begin their year's work in the autumn term. There is no other time in the year, that provides us with so many simple natural objects. The apple, pear, plum, acorn, nut, rose hips, etc., are such splendid examples for children to try their powers of modelling, drawing and painting upon. And so it is, right through the autumn; most interesting objects with simple outlines, suitable for bold treatment, may be provided for study, for the first two or three months of the year.

Now we have to consider the work of the second term, from Christmas to Easter. Having had Gifts III and IV, the child will appreciate and derive much benefit from the use of Gifts III and IV combined, which should, for the rest of the year, be given him not less than once a week. By means of combining the two gifts in one box, the scope of the child's efforts is enormously increased, and he will find that he can build something or other in connection with nearly every week's work, besides designing many delightful objects in his free play with the gift. Gifts V, V*b* and VI are very seldom used except in the Kindergarten. If introduced in an elementary school, they should be used by classes of children six to eight years of age, as they demand great dexterity and delicacy on the part of the finger muscles which little children are physically incapable of. So much of the clumsiness which we deplore in some children is due to this comparatively slow development and co-ordination of the smaller muscles of the hand.

So far, with the exception of the clay, which is the most plastic of all substances, the child has not dealt with materials that demand much manipulatory power, but his fingers have been enormously strengthened by his first term's work, and he is now ready to deal with more plastic materials and tools. At the beginning of this term, he should start paper folding, making

life forms of the simplest from the square. A few symmetrical forms may also be folded, in order to strengthen his ideas of balance and the laws of design, but geometrical paper folding should not be taken till the next year. Paper cutting should come about half way through the year. The first example given to the child should be a square of about three inches, on a four-inch ground. This should be hektographed by the teacher for each child, by means of any duplicating apparatus ; then, after being carefully coloured by means of crayons, the square should be cut out. It is very simple to form such objects of interest as houses, with doors and windows and bricks to colour, from the square. These should afterwards be cut out. When the children can do these straight-lined objects fairly well, they can proceed to circles and curves, but at this stage of the proceedings all the objects should be hektographed by the teacher in order to ensure correctness of outline. This occupation of paper cutting can be utilized largely to the end of the child's days in the infants' school, but in the later stages of his work, he should draw the objects for himself before cutting them out. Free paper cutting is also a very educational and developing occupation for the child. As he does not draw the object, he has to keep the form strongly before his mind's eye while he is using his scissors. Paper cutting in two or more colours is very effective, and the introduction of the colour element makes the occupation much more fascinating to the child. For example, a tomato can be drawn upon a square of red paper, taking care to choose the shade carefully, and to have a glossy paper if possible, to simulate the smoothness of the fruit. After it has been cut out, the green calyx and stem can be cut from a small piece of paper, and both mounted together on a white or brown paper ground. Carrots, turnips, strawberries, etc., may be treated in the same way.

There are so many ways of utilizing this occupation, and they are so little realized, that it might be well to suggest one more, from which many others may be developed.

In the upper classes, a picture may be made in the paper-cutting lesson to illustrate the story. Take the story of Grace Darling, for instance. The teacher might prepare a simple background on brown paper, while the children are cutting out the objects they have chosen. With quick hand she sketches in light wavy lines for the sea, heavy frowning rocks, and an island in the midst of the waters. Then the picture can be completed by the children. One makes the lighthouse and pastes it in position on the island, another contributes the wreck, another, the little boat in which the brave girl sailed to the rescue, many others will bring white-winged birds which hover over the scene, and some imaginative youngster supplies the moon. Think of the value of such a picture to the class. " We made it," they will say proudly, and each will valiantly vie with the other in competition for the best draughtsmanship.

In the third term the class may take up brushwork, and after a few preliminary lessons, which are necessary to teach the right handling of the materials, simple nature work should be attempted, taking care to choose such things as are within the child's powers of reproduction. No other new occupation need be introduced ; indeed, if preferred, brushwork may be kept over until the child is in the next class, and increased dexterity and skill acquired in drawing, clay modelling, paper folding and paper cutting during the last three months.

Thus during the year, the child will have dealt with Gifts I to IV, tablet laying, stick laying, freearm drawing, clay modelling, paper folding, paper cutting and brush drawing. If these seem too many for one year's work, it must be remembered that several are only used for a few months, in order to give the child the ground work of the system, so to speak, without which he cannot be expected to follow with a clear, intelligent mind the later developments. He must have clearly demonstrated to him, the essential, underlying unity in all things, the derivation of plane from solid, and line from plane, if he is to have an intelligent understanding of the material he uses. A child so trained during his first year in school at five years of age, will be well equipped for the studies which follow. His eye will be trained to see correctly, to measure and to balance ; his fingers will have been trained in manual dexterity, and his busy little brain will have had many invaluable lessons in observing, imitating and classifying, and all the mental processes which are natural to an intelligent and well-taught child of that age.

Scheme of Gifts and Occupations

SEPTEMBER . . .	*Gift I—colour teaching, gift plays. *Clay modelling of balls and objects formed therefrom. *Freearm drawing from the circle. *Tablet laying with circles. *Gift II—form teaching, gift plays. Clay modelling of cube, cylinder, and objects derived therefrom. Freearm drawing of right-lined objects.
OCTOBER . . .	Gift II, continued. Clay modelling as before, course from the ball. Freearm drawing, connection of straight lines with circles. Tablet laying, with circles, squares and triangles. *Gift III. Clay modelling, a course from the ball, continued. Freearm drawing, simple objects. *Stick laying of simple objects, square.

* Indicates the introduction of a fresh gift or occupation.

NOVEMBER . . .	Gift III, continued. *Gift IV. Clay modelling and drawing of the brick. Freearm drawing of objects oblong in shape to emphasize outline of the brick. Tablet laying as before. Stick laying, introducing short and long sticks.
DECEMBER . . .	Gift IV, continued. Clay modelling, Freearm drawing, Tablet laying } exercises increasing in difficulty. *Ring laying may be combined with stick laying.
JANUARY . . .	*Gifts III and IV combined. *Paper folding, forms of life and beauty. Clay modelling, continued. Freearm drawing, continued. Tablet laying, continued.
FEBRUARY . . .	Gifts III and IV combined, continued. Paper folding, a course from a ground form. Clay modelling, Freearm drawing } in connection with stories and nature lessons. *Paper cutting of hektographed objects.
MARCH	Gifts III and IV combined, continued. Paper folding, objects in connection with stories. Clay modelling as before. Freearm drawing as before. *Crayon drawing of spring flowers. Paper cutting slightly more advanced.
APRIL AND MAY . .	Gifts III and IV combined, continued. Clay modelling in connection with stories, etc. Freearm drawing, special practice in drawing from nature. Paper cutting as before, also free cutting. *Brushwork, preliminary lessons.
JUNE AND JULY . .	Gifts III and IV combined, continued. Clay modelling as before. Freearm drawing as before. Paper cutting, two colours introduced. Brushwork from nature.

* Indicates the introduction of a fresh gift or occupation.

Reading, writing and arithmetic have not been mentioned in this scheme, but they demand separate treatment. With regard to the time allotted to them, one lesson of twenty minutes each day in reading and arithmetic, and a writing lesson of the same duration three days a week, should be ample. On the other two days, drawing or printing should take the place of writing. Reading and arithmetic should always be taken in the morning while the children are freshest ; the writing can very well be left until the afternoon, as there is no mental strain connected with it.

In the teaching of reading it would seem best to entirely ignore the fact that the child may have been taught at home. If he has received teaching, it will almost certainly have been on the alphabetic system, with which for the present we have nothing to do. The method of teaching should be somewhat akin to that sketched in Chapter V of this book ; sounds should be introduced to the child's notice by means of stories. In this case, however, you will find that you can proceed more rapidly. The best plan is to teach the following consonants :—

p, b, t, d, m, n, c, and the vowel a.

As soon as the child has mastered these, what a number of interesting words can be made, and stories told and pictures drawn, and games acted in connection with them ! Look at the list of words first, and see what material you have for stories.

pad	bat	tap	man	cap
pat	bad	tab	mad	cab
pan		tan	mat	cat
			map	can

The children should be encouraged to print their own words, and make their own pictures. When they are ready, the vowel i may be shown to them, and new words made ; then a few more consonants such as f, v, l, r and the tall sister of c, who has just the same sound, viz. k. The remaining vowels should be taught in this order :—o, then e, and then u. Only the short sound of each vowel should be attempted, as in, mat, pit, pot, pet, but. Personally I am strongly against any introduction of the alphabetic method, and attempts to correlate the name of the letter with its sound at this stage. Children find it most confusing, if taught on this dual system, and much valuable time is lost in leading them out of the maze ; whereas they pick up the names of the letters without any difficulty a little later.

As soon as the class is familiar with a few words and the method of forming them, simple sentences should be made, so that within a couple of months of his coming to school, the child is reading. As his reading is always

acquired by means of, and connected with a story, so he will learn to look upon books, as the means whereby he may gain these delightful stories for himself. His reading lesson is of as much interest to him as any other, if thus connected with his own life and experience, by means of stories and pictures.

No rule can be laid down as to the date of the introduction of reading books; that date is determined by the moment when the child begins to ask for a book and to look for a wider range than the blackboard gives him. At the end of the year he should be able to sound and tell any phonic word of four or five letters from the blackboard; such words as duck, quack, swim, pond should present no difficulty to him; he should also be acquainted with the commonest double sounds, such as sh, ch, th, ng, and words in which they occur, such as dash, chop, thin, ring; and be able to read simple sentences from the blackboard or reading book. I give as an example the following:—

Dan's dog, Jack, can swim well.
Jack went into the pond for Fan's doll.
The duck was on her nest with six eggs in it.
Quack! quack! quack!
Jack swam back to Dan with the doll.
Fan was glad.

An intelligent teacher could frame a week's work on the material given in that simple reading lesson. Number, reading, writing could all be taken in connection with it. The story of the Ugly Duckling could be told, nature lessons on the swan, ducks and ducklings could be given, the game of Ducky duck dillies played, and the following occupations worked in—

Blackboard Drawing	An egg—ducklings.
Paper Cutting	An egg.
Clay Modelling	The nest and six eggs.
Brushwork	Ducks on a pond.
Paper Folding	A boat.

The children's pleasure would be greatly enhanced, if the teacher made them a picture to illustrate the reading lesson.

The subject of arithmetic has been so fully dealt with in Chapter V that little more need be said. Since writing that chapter however, I have become more practically acquainted with a piece of apparatus for teaching number called Tillich's bricks, and have no hesitation in warmly recommending its adoption in all Infant Schools. It should form part of the apparatus for the teaching of this difficult subject, and be used frequently, not however to the exclusion of such things as counters, shells, etc. As a rule, children of five who have had no teaching, will have little or no grasp of number beyond 4. So that for the first term it will be quite sufficient, if they acquire an intelligent

acquaintance with numbers up to and including 6. By Easter 8 should be grasped, and during the last three months 9 and 10 should be dealt with. It is well to attempt nothing further ; indeed, if children thoroughly understand the composition of 10, their path to the later developments of number will be materially straightened out, and made smooth.

The subject of writing presents no difficulties. I have already, in pages 79 to 81, sufficiently indicated the path such teaching should take.

CHAPTER XI

INFANT TEACHING IN RURAL SCHOOLS

When considering the subject of the teaching of Infants in rural schools, we are met by many difficulties of buildings, staffing, and classification, but again it cannot be denied, that there are many advantages to counterbalance these adverse circumstances. One of the greatest advantages, is the increased possibilities for creating a home-like atmosphere. Where the school is large and the classes many, there are rules and restrictions necessary, that are often very inimical to the family feeling that is so pleasant, and that provides such a healthy atmosphere for the children. Another, and a priceless boon, is the actual living in the country,

> So near to the great warm heart of God
> That we almost seem to hear it beat
> Down from the sunshine and up from the sod.
>
> —*Lowell.*

The child's life is spent amidst Nature's miracles. He watches the earth as she frees herself from the icy chains of winter, and slowly dons her garb of living green, and then in the glorious summer time, he is surrounded on all sides by the wondrous and gorgeous colours, painted with the inimitable pigments of Dame Nature. For him are the beauties of the waving corn, the russet, gold, and crimson of the autumn leaves, the scarlet berries in lane and hedgerow. For him too, and the cleansing of his heart and soul, is the mantle of snow, pure and white, which clothes the earth as with a garment. The wondrous procession of the seasons are his to an extent which is impossible for a town child, and wherever he goes in later life, those early years spent so near to Nature will be a priceless possession and source of refreshment in weariness and trouble. But it rests with the teacher whether the child makes use of these boundless opportunities. Too often, familiarity breeds contempt and apathy. The child does not see and appreciate the exceeding beauty which surrounds him, because his eyes are not trained to see, nor his heart to appreciate. Nature Study should lead to love of nature, as well as knowledge of all her wondrous works. The heart must be touched as well as the head.

So far we have only thought of the advantages of rural schools. The disadvantages are equally obvious. As a rule there is no trained teacher for the infant class. The children are under the charge of a Supplementary teacher. But training alone does not make a good teacher, and if only there are the principal qualifications of sympathy and intelligence, there is no reason why the teaching and training of the infants in rural schools, should not be quite as good and effective, as that which children in urban districts receive.

Another difficulty is that of classification. As a rule, all the children between the ages of three and seven have to be taught in the same room. Fortunately, in most country districts, the distance is so great between the home and the school, that very few children are sent before the age of four and a half.

Other difficulties are poor buildings, want of floor space, insufficiency of apparatus, etc., but it must not be forgotten that in every town, there are many schools that are hampered by one or more of these deficiencies, and it is not seldom that the best work is done under these very conditions, because they bring out the teacher's native resources, and help her to rise superior to her circumstances.

So that we have to think of both advantages and disadvantages, when considering the teaching and training of infants in rural schools, and endeavour to make the highest possible use of the former, in order to counterbalance the latter. More than that; many difficulties when resolutely faced are not as insuperable as they seem. Some have to be accepted as they stand, and made the best of. There are many rural schools, where the methods of teaching are infinitely better and more intelligent, than those used by teachers in urban districts. Not only so, but in spite of antiquated buildings and apparatus, insufficiency of staff, etc., the rooms present a bright, happy, well-cared-for appearance, that is lacking in only too many town schools. Enthusiasm and courage accomplish miracles. There is a great danger among teachers in rural schools to minimize their natural advantages, and magnify their difficulties. They say, " Oh, yes ! that's all very well for you, but it's impossible for us ever to take it up. We could not do anything at it," when their friends in the town speak of what they are doing in school. The initial difficulties are as lions in the way, and they are too faint-hearted to make the attempt; but nothing was ever done well, without enthusiasm to start it. Enthusiasm is the lever of the world, and we cannot do without it in school.

In order to approach this subject in a practical way, let us take a hypothetical case. We will suppose that we have to organize an infants' class in a rural school, where, as is usually the case, there is a separate room for children below Standard I. This room is under the care of a Supplementary teacher,

who is herself under the superintendence of the Head Master. There is no help given with the infants, except such as may be occasionally rendered by a Standard VI or VII girl. This is taking an average case. As a general rule, these infant classes contain any number of children from twelve to about thirty-five, so we will suppose our average attendance to be thirty. In such a class the numbers will run something as follows :—

Children of four and under	7
,, five	10
,, six	10
,, seven	3
	30

For general work it will be best to make two divisions—A consisting of the sixes, forward fives and any sevens ; B consisting of backward fives and all under that age. This will probably give two nearly equal divisions, the A class being slightly larger than the B class. But this classification should not invariably be adopted. For some lessons the whole of the children will be taught together. Such are, Scripture, stories, recitation, singing and nature lessons. For others, it will be found best to group all except the threes and fours for work, while the little ones either amuse themselves, or are under the supervision of an upper standard girl, out of doors preferably.

The Time Table.—The time table needs very serious consideration, for after that is rationally and satisfactorily settled, more than half the battle is gained. But experiment is necessary to show just what is best for each school, and modifications made accordingly.

Time Table

	9–9.30	9.30–9.55		10.5–10.30		10.45 to 11.10	11.10–11.40	11.40–12	2–2.25	2.25–2.50		3.5–3.30	3.30–3.55
M.	A Hymns B „	Reading Building (free)	9.55–10.5 Drill, Action Songs, etc.	Number „	10.30–10.45 Play	Story „	Illustrating Story „	Games „	B.B. Drawing Sounds	Singing „	2.50–3.5 Play	Writing Stick-laying	Recitation „
T.	A Bible Story B „	Number Stick-laying (free)		Writing Sounds		Nature Lesson „	Brushwork Colouring (free)	Singing „	Reading Drawing	*Girls*—Sewing *Boys and Div. B*—Clay Modelling		Games „	Free time Conversational Lesson
W.	A Repetition B „	Reading Building (free)		Number „		Nature Lesson „	Clay Modelling „	Games „	Drawing „	Singing „		Writing Paper Folding	Recitation „
Th.	A Bible Story B „	Number Stick-laying (free)		Writing Sounds		Nature Lesson „	Paper Cutting (free) Building	Singing „	Reading Drawing	*Girls*—Knitting *Boys and Div. B*—Modelling or Paper Folding		Games „	Picture Talk „
F.	A Hymns B „	Reading Building (free)		Number „		Nature Lesson „	Cane Weaving or Free Brushwork Colouring	Games „	B.B. Drawing Sounds	Singing „		Free time till 3.55 Stories, games—free occupations, etc.	

Notes on the Time Table

1. On Monday, Wednesday and Friday all the children except the very little ones should be grouped for number from 10.5 to 10.30. On Tuesday and Thursday, from 9.30 to 9.55, more advanced number may be taken with the A division alone.

2. The occupations stated for the various days are quite arbitrary—they are only put so for the sake of demonstration. The preceding lesson in the morning governs the occupation.

3. On Tuesdays and Thursdays the clay modelling course should not be taken all the year round, but be changed from time to time for another occupation.

4. Where the brackets occur, both divisions may be taken together.

5. The blackboard drawing of the upper division on Mondays and Fridays should be memory work or copying from nature, so that the teacher is left free for the little ones. On Wednesday she might take a drawing lesson with the upper division, while the lower division takes free drawing.

The time table given should work well and smoothly, but only practice will show what grouping is best for the various subjects. It is arranged so that the teacher can work both divisions with very little help, at one time giving all her attention to one division, A or B, while the other occupies itself either under her preliminary direction or freely; at another time giving a little attention to each division in turn, and again grouping the whole class for collective work. In order to understand this, we will run through a sample day, taking Tuesday.

School will be opened at 9 by prayer and a hymn. After a brief chat in connection with any flowers the children have brought, any local event, any item for the nature calendar, the children will be ready for their Scripture story at 9.15. At 9.30 sticks should be given out to division B for free stick-laying, or for making objects in connection with Monday's story, while a number lesson is taken with division A. A short interval should follow for physical exercises, action songs or finger plays. Now the upper class may do some copy writing while the little ones have a lesson in sounds. After the writing has been examined, a quarter of an hour in the playground or fields should break the morning's work. At 10.45 the nature lesson will come, sometimes in the classroom, but oftener in the fields and lanes in suitable weather. Under normal circumstances the occupation, or expression lesson in connection with the preceding nature observation, will come next, but frequently during the warm weather, it will be wiser to keep the children out for the whole hour, and take the occupation when they come in at 11.40. Supposing the lesson to be best illustrated by brushwork, the little ones can colour a picture previously prepared (*see* p. 91), after a few hints from the teacher, while she devotes her energies to the painting lesson, the materials for which have been prepared in play time. Lastly the whole class will be grouped for singing; this will complete the work of the morning.

Afternoon school opens at 2 o'clock with reading for the older children and drawing for the little ones. Here the attention of the teacher will be divided. While the reading class is looking over the piece to be read, and preparing words previously put upon the blackboard, the teacher will start the drawing class ; then when they have begun, she will leave them and hear the reading. Before the afternoon lessons begin, needlework should be put out for the girls in the upper division, and at 2.25 the services of an upper standard girl might be enlisted, to take the sewing under the teacher's directions, while a clay modelling lesson is given to the rest of the children. Play time comes at 2.50. After play all the class may be kept out for games, which are always best taken in the open air. If taken in the classroom, guessing games, acting nursery rhymes and fairy tales may sometimes be utilised. This will be followed at 3.30 by a conversational lesson or picture talk, which may be taken sometimes altogether, and sometimes for the little ones only, while the elder ones have free time. At 3.55 the children will be dismissed after the evening hymn and prayer.

This sample day will form an index to the way in which the work should be taken. The great thing is to have a clear idea of the day's work in your mind, and to have all material ready to hand before the morning and afternoon sessions begin. No time is specially set apart on the time table for walks ; this will be decided by the nature of the work on hand, and the weather.

The Infant Room and its Arrangement.—With regard to the actual room in which the children are taught, there are various points to consider. There is seldom much floor space, and for this reason, the arrangement of desks must be considered carefully, especially during the winter, when games have to be taken indoors. We want to adopt the arrangement which will give the largest space possible. Then the subject of ventilation must be considered. The smaller the room, the more important is the question of ventilation. If the room be small, the children should all go out for a few minutes at least twice during each session, so that doors as well as windows may be opened, and the air thoroughly changed. Windows should always be kept open (*see* pp. 123 and 124). Often in rural schools, there is some difficulty in getting quite the kind of apparatus that one wants. The existing material has to be made the best of, and adapted to meet the new requirements. People are apt to be discouraged by this, instead of endeavouring to find a substitute. Take boards for freearm work for example. Perhaps it is impossible to get them, at all events just when they are wanted, but that need not prevent freearm work being taken. If the wall is smooth, a dado of good brown paper will do admirably. It should be not less than two feet wide, and be fixed all round the room at a suitable height. If the children are taught to use their chalks

lightly, and to rub out as little as possible, the paper can be cleaned and used several times. It entails very little expense to keep this brown paper replenished, as it can be used both sides, but of course in the long run it is really more economical to have boards. The cheapest kind, viz. strawboards with a blackened surface, are very cheap, but they require stands. These are used on the desk. There are various kinds of blackboard cloths, that may be bought and fixed round the walls. These give satisfactory results if kept free from grease.

A charming effect may be produced by using a brown paper dado for brushwork. When a child has painted his flower or any other nature specimen well, let him be allowed to paint it again on the dado. The space may be divided up into panels, squares, ovals, etc., by means of large templates, according to the nature of the study which is to be made. The children will take great interest in this collection of paintings from nature, and they give a very pretty effect.

Many are the uses to which brown paper may be put. One can hardly have too many pictures of the right sort in the infant room, and it is often very difficult to get just what we need. The pictures that we make can show the very features that we want to emphasize, while leaving out all superfluous detail. Brown paper and chalk are the cheapest materials for these illustrations and the easiest to use, and if coloured chalks are employed the pictures look very realistic.

The School Garden.—The school garden is not as common a feature in rural schools as one would expect to find it. Teachers seem to think that, as the child lives in the country where flowers, fruits and vegetables may be seen growing everywhere, there is no need of a school garden. Surely that is a great mistake. Acres of land at home cannot serve the same purpose as a little piece belonging to the school, tilled, and watered, and planted by the children themselves. There is a feeling of communism, of fellowship and brotherhood about that plot of garden, which belongs to the children as members of the same school. But its value is not only a social one. Nature Study is enormously aided and furthered by it. In our own garden, we can grow just what we need to furnish illustrations of our schemes of work. What we plant in it, is regulated by the subjects we intend to study during the year.

The actual arrangement of the garden will vary in different cases according to circumstances and tastes. In one school, the ground may be divided into plots, each one being the particular possession of a special class. Where there is a large garden, every child might have a little plot to himself. A kitchen garden should certainly be established by the older children. Here,

potatoes, parsnips, carrots, cabbages, peas, beans, lettuce, onions and all such vegetables should be grown. A few fruit bushes and plants are also very valuable. Gooseberries, currants, and strawberries grow with very little care.

In one very small rural school that I visited a few months ago—a school so small, that there were only thirty-five children present, including boys, girls and infants—I found a very beautiful record on the wall, written in a round boyish hand :—

> Oct. 1906. Dug 10lbs. of large potatoes for the Harvest Festival.
> Cut a large bunch of flowers for the decoration of the Church.

I learned that it was the children's joy and pride, to cut flowers on all possible occasions to adorn the House of God, and at the time of thanksgiving for harvest, they gave of their best, the fruits of their labour, to lay at the feet of the Giver of all good things. The shadow of the ancient Church of their fathers lay upon the garden and school, seeming to sanctify both work and play. The firstfruits were " holy to the Lord," and the promised blessing would surely follow.

Another beautiful use to which the flowers grown in the garden may be put, is to send them to the sick. A little playmate home from school, may have his heart cheered and his spirit lightened by a bunch of flowers from " our garden." Common as light and air though the blossoms may be, they will be priceless treasures to the little invalid, coming as they do with the loving wishes of his schoolmates. And since the hand of death may not be stayed even in the country, these flowers from the children's garden will sometimes be sent, to houses where hearts are sore and bleeding from the visit of the angel, who bears a branch of amaranth, and brings release from pain and sorrow.

Speaking of sickness, how many rural schools might supply flowers from garden, field and hedgerow for the children's hospital in the nearest town ! These things are not done ; and why ? Simply for want of thought. When the suggestion is made, it is taken up gladly ; but one does not think of these things.

Another great opportunity of rural schools, which is similarly neglected, is the supplying of town schools with boxes of material for nature study (*see* p. 38). Children who love and appreciate the beauties of Nature, will be only too ready to gather and give of their abundance to fellow children who live in the smoky town, far from the leafy lanes and flowery meads ; children to whom those eagerly anticipated boxes of flowers are as the visits of angels

Suggestive Scheme for Rural Schools

SPRING

Nature Lessons	Suggestions
SECTION I.—*The Garden.* The first flowers of spring (snowdrops and crocuses). The later flowers of spring (daffodil, narcissus, tulip, etc.). The growth of a hyacinth bulb. The work of rain. Slugs and snails. The earthworm. Preparing the flower beds. Sowing and germination of seeds.	*Expression Lessons.* Brown paper drawing books interleaved with tissue paper should be supplied to the older children. The spring flowers should be drawn in these with coloured chalks. The painting of the spring flowers should be done on tinted paper if possible : a grey shade of paper gives a very good result. For germination of seeds, see p. 43. This subject should be taken in detail with the older children.
SECTION II.—*The Wood.* How to recognize trees. Twigs and buds—(structure). The development of a bud. Catkins and trees that bear them. The flowers of trees. The bluebell, violet, primrose, cowslip and anemone. Birds' nests and eggs. Young birds—how they are fed and protected. Bird enemies. The cuckoo and skylark.	Many walks should be taken in connection with this section, and twigs and buds from all common trees should be brought into the school for closer study (*see* p. 42). The likely places for nests should be noticed while the trees and hedges are bare ; there will be more chance of finding them later. Great care should be taken not to frighten the birds when observing the nests, or they may forsake them. Too frequent visits should be discouraged.
SECTION III.—*The Farm.* Ploughing and harrowing. Drilling and sowing. Sheep, lambs, hen and chickens. Ducks and geese ; turkey. The horse and his work. The farmer's carts and dogs.	All these operations should be watched in the fields, before detailed lessons are given in the classroom. The animal lessons in this section may be confined to the little children, while the older ones take more detailed lessons on plant life, bird life, and the section on pond life.
SECTION IV.—*Ponds and Streams.* Tadpoles. Frogs. The kingfisher. The swan. The moorhen. The otter. Water lilies. Reeds and rushes. Other water plants.	An aquarium should be bought, or better still, made by the boys in the upper school. Here both frog and toad tadpoles may be kept and watched. If the spawn is obtained, children can note the whole metamorphosis from egg to frog. When the last stage is nearly reached, care should be taken to provide a certain amount of dry land for the little creatures, otherwise they may be drowned when the final change takes place (*see* p. 48). The habits of the kingfisher, moorhen, swan, etc., should be noted by the children, and any other animals common to neighbourhood.

SUMMER

Nature Lessons	Suggestions
SECTION I. *The Garden.* Our gardens in summer. Gardening. Our tools. The work of the sun. The rose and its relations. The sweet pea and its relations. The sunflower and its relations. Poppies. Cornflowers. Any common flowers grown locally. Butterflies and their life. Bees and the beehive. The spider and its web.	*Expression Lessons.* It will be necessary to spend a good deal of time in the garden at this season, weeding and watering. Many lessons should be given in the open air. The children should be encouraged to group both wild and garden flowers in families, and be able to tell their similarities. *All* flowers grown in the school garden should be studied specially, from seed to fruit. Butterflies should be observed in fields and gardens, but never killed for specimens (*see* pp. 48 and 49). In some cases, it would be possible to keep bees in the school garden.
SECTION II. *The Woods and Fields.* Common singing birds. Our bird visitors. The swallow family. How birds sleep. The horse-chestnut tree. Special study of common local trees. The hedgehog and its young. The weasel. Rabbits and hares. Some common ferns. Mosses.	All birds which are common locally, should be studied all the year round, and their habits noted—where they build, the kind of nest they make, when they build, how many eggs they lay, etc., and notes should be kept of all these observations, also the first and last date of the cuckoo's note, the coming and going of the swallow, and other common migratory birds. The trees in the immediate neighbourhood should be named, and their position noted in summer, then they can be identified in winter and other specimens by them.

SUMMER (*continued*)

Nature Lessons	Suggestions
SECTION III. *The Farm.* Haymaking. The cow. The dairy. Milk, butter and cheese. Pigeons. Harvesting peas and beans. Kitchen garden plants. Summer fruits.	*Expression Lessons.* By the courtesy of some friendly farmer, the children may have an afternoon's work and fun in the hay-field ; also a visit of observation to the dairy, when all the children should be expected to make mental notes, which will be utilised in a following lesson. The subjects of kitchen garden plants and summer fruits will give an abundance of material for expression lessons, especially in painting, drawing and modelling.
SECTION IV. *The Ponds and Streams.* Sticklebacks and their nests. Newts and their development. Caddis worms and flies. Dragon flies. The trout. The May-fly. Other common insects. Common water plants. The water vole.	Any one who has read *The Boyhood of a Naturalist* will know how difficult it is to keep water creatures at peace in a confined space. I shall never forget my sensation of horror and disgust, when the first tadpoles I ever kept developed cannibalism, and proved the truth of the survival of the fittest before my very eyes. I need not say with what celerity they were hurried off to the nearest pond. In my ignorance, I had not fed them properly—the consequence being that they found food for themselves. Water creatures need the greatest attention, and to prevent tragedies, it is best to keep the various species separately, unless you know for a fact that they will live peaceably together. Any one who keeps water creatures should read the delightful book mentioned above.

AUTUMN

Nature Lessons	Suggestions
SECTION I. *The Garden.* The dahlia. Seed vessels. How seeds are scattered. Plant defences. The wind and its work. Bulbs. How plants store up food. Preparing for winter. The potato, carrot, turnip, parsnip, etc. The chrysanthemum.	*Expression Lessons.* There are not many flowers to study once September is over, but the numerous seed vessels should receive detailed attention, especially those which are in the garden, and which the children bring from fields and hedges. Bulbs should be individually studied, and their peculiarities noticed before being planted. Onion bulbs are best for dissection—the larger the better. Some should be peeled, others cut through, and some should be grown in water. Carrot tops should be grown to show the storehouses of plants.
SECTION II. *The Woods and Fields.* Hips and haws. Blackberries. Nuts and nut trees. Nut eaters. The fall of the leaf. Tree fruits. The oak tree. The oak tree's visitors. The squirrel. Migration of birds. The pheasant. The partridge. The grouse. Mushrooms and other fungi. The iris. Autumn berries.	This section and the next, give an abundance of material for nature study of all kinds right on towards the end of November. These two sections should be worked together. For instance, in most cases, the subject of the harvest should be taken as soon as school commences after the summer vacation. The harvest of roots should be taken about the same time; then the harvest of fruits of all kinds from orchard, woods and field. The special study of tree fruits, such as the winged ones of sycamore, ash, etc., will come next, together with nutty fruits and nut eaters. Then the lessons on game will come in October and November. Those on the fox, stoat and weasel may follow, while the subjects of autumn ploughing and preparation for winter brings us to the last season.

AUTUMN (*continued*)

Nature Lessons	Suggestions
SECTION III.—*The Farm.* The harvest of roots. The harvest mouse. The harvest of corn. The miller and his work. A loaf of bread. The baker and his work. The orchard in autumn. The apple and pear trees. The plum and damson trees. The life of the fox. The stoat and weasel. Autumn ploughing. Preparation for winter.	*Expression Lessons.* The autumn term is the best time for beginning courses of drawing, clay modelling, etc., as it furnishes us with so many natural objects of a simple type. The cottage loaf, the apple and pear, the plum, the acorn, the nut, the bulb, the potato, carrot, turnip are all suitable for inclusion in a first course of clay modelling and free-arm drawing. Painting from nature may well be started in this term with the mountain ash leaves and berries, rose hips, acorns, bulbs, sycamore and ash keys; mass painting, with the apple, pear and plum. The reproduction of autumn foliage may be attempted in the upper classes —the leaves of the Virginian creeper, oak and blackberry in their various shades of crimson, gold and brown being good subjects. (*See* paragraphs on pressed leaves, pp. 51 and 52.)

WINTER

Plant food in the soil. Plant food in the air. The garden in winter. The farm in winter. The woods in winter. Evergreen trees. Pines and firs. The yew and holly trees. Evergreen plants and shrubs. Ivy and mistletoe. Some winter sleepers. The dormouse and hedgehog. The mole and bat. Birds in winter. The robin. The sparrow. The starling. Jack Frost and his work. Snow and ice. Cold countries and their inhabitants. Animals with fur coats. The reindeer. Christmas time. A Christmas pudding. Lessons on food and clothing.	The Winter scheme is a short one, as we only require lessons for about ten weeks. About the middle of February we begin our Spring lessons again. The evergreen plants and shrubs will give opportunities for painting. Christmas cards should also be painted, but beyond these there is little nature painting suitable for young children during the winter term. Courses may now be advantageously followed, to give extra facility in free-arm drawing, paper folding and paper cutting. Clay modelling should be dropped in *very* cold weather. The clay chills the fingers and is unpleasant to handle. The lessons on birds may be extended to include any winter visitors to the neighbourhood, also thrush and blackbird, rook and crow. Christmas time should be made a time of real joy and festivity. The school should be decorated and everything done to foster the true Christmas spirit. Last year we made Christmas puddings in school, every ingredient being supplied by individual children.

Notes on the Scheme of Work

1. I have not suggested any stories, songs, games, or recitations. Many suitable ones have already being mentioned on pp. 55–62. Hints for expression lessons may also be taken from the same source.

2. It will be noticed that the headings of the sections are almost exactly the same for all four seasons. The garden, the woods, fields, lanes and hedges, the ponds, the farm are all studied right through the year. The immediate neighbourhood of the school is the children's happy hunting ground. And lest this should be considered too limited a sphere, let me quote a great authority. Richard Jefferies (*see* p. 40) says :—

"During a twelvemonth every creature would pass over a certain locality. The whole army of the woods and hedges marches across a single tree in twelve months. A single tree is visited by four-fifths of the birds that ever perch in the course of that period. . . . It is difficult to believe that one would not see more by extending the journey, but, in fact, experience proves that the longer a single locality is studied, the more is found in it."

SUPPLEMENTS

A. HOW WE CELEBRATE CHRISTMAS—A SUGGESTION

I AM writing this supplement as a suggestion. I know that in many schools nothing is done to celebrate the joyous and blessed season of Christmas, and I should like to show how much can be done with very little expense. The whole cost of providing a splendid Christmas treat for 200 children was only £2 4*s*.

We had a fine tree, adorned with candles ; every child had a toy, a stocking full of sweets and an orange for this amount.

We keep Christmas all the last week of the term, and, alas ! it is all the " Christmas " that many of our children get. With fathers " out of work " and many little hungry mouths to feed, it is as much as the poor mothers can do to provide food for their families.

Our hall and classrooms are gaily decorated with evergreens ; we cull all the Christmas pictures from magazines, and tell them Christmas stories in abundance.

Every teacher either paints a Christmas tree for her own class, or draws one on the reverse side of her blackboard, filling it up with toys suggested and drawn by the children from day to day. A short time in the day is set apart for dressing the tree, and the children enjoy it immensely. One very charming idea, suggested to me by a resourceful teacher, is to paint the tree unadorned, and then let the children draw and cut out the toys for it in variously coloured papers or cardboard. Each child should be allowed to paste his toy on to the tree. Let me describe our Christmas, 1904.

On the breaking-up afternoon we had an actual Christmas tree for the children. For weeks beforehand we were busy making up little net stockings with brightly coloured wools. On the last morning these were filled with wholesome sweets. We dressed a little doll for every girl, and every boy had a toy—whips, balls, tops, musical (?) instruments, engines, etc. Each toy cost the large sum of one penny, or, to be precise, the toys were tenpence per dozen. It is marvellous what you can buy to-day for a penny.

During the morning of the last day the children painted their Christmas cards for their parents, and in the dinner hour the teachers set diligently to work to dress the tree. Every toy had a slip of paper with the child's name pinned, or sewn, or tied on to it. Little candles were wired on to the tree in safe places, so that there was no danger of anything taking fire, and the staff was provided with wet sponges fastened to long sticks for temporary candle snuffers.

At two o'clock the children arrived, round-eyed with wonder, radiant with pleasure. We had previously arranged desks all round the hall, and these were quickly filled to overflowing with the elder children, while the little ones sat on the floor with their backs against the desks. To begin the proceedings we sang all our Christmas songs with appropriate actions, many of them invented on the spur of the moment by the children themselves. Then we pulled down the blinds, and in a breathless silence of anticipation the pretty coloured candles were lit. The tree was a blaze of light and colour, and the children hugged themselves with delight, with long-drawn " Oh——'s ! " For ten minutes or so we let the candles burn, then in order to prevent any possible accidents, as they began to burn down and drop the wax, we put them out.

But the great moment was yet to come. According to our programme, we sang " Old Father Christmas is here with us again." Scarcely had the last note died away, when a thundering knock resounded through the school, and amid joyous shouts from the children in came that venerable personage himself, clad in his time-honoured costume of

scarlet trimmed with white fur. Over his back was slung a huge sack, from the top of which peeped flags and toys. Scarce could the children believe their eyes. True, they had had some idea that Father Christmas might possibly pay them a visit in person, but they could hardly hope that such an extraordinarily busy person could possibly do them such an honour. A sharp look-out was kept by the teachers for any small people who were frightened, and they were picked up and comforted.

Father Christmas distributed some of the presents from the tree, but owing to pressure of business he could not stay long. Before he left he produced from his pack an elegantly tied-up little parcel, and the children were highly delighted to see " Governess " receive a present too. Needless to say, she too was charmed with the thoughtfulness which had ensured that she should not be left out on this present-distributing occasion.

Amid shouts of " Good-bye, Father Christmas ! " our venerable guest took his departure, and the rest of the toys were dispensed by the staff, who were much surprised to find that they too had been remembered.

It was pathetic to see the anxious faces of those little people whose presents were not discovered till late. They looked at their more fortunate neighbours nursing dolls or blowing whistles, and appealed to any one who passed them with tears in their bright eyes—" *I* haven't got a present. Isn't there one for me ? " And then the sudden shining of the sun through a mist of rain, when the missing treasure was found. At last the tree was bare, and you can imagine the Babel of sound—French horns, trumpets, whistles blowing, engines running along the desks and floor, guns banging, merry voices laughing and talking. Oh ! the delight of it all ! We were fully as excited as the children, revelling in their joy. The sweets were fast disappearing from the stockings, and those who could not get their sweets out evidently did not object to the combined flavour of sweet *and* stocking.

Finally oranges were distributed, and the happy children trooped home, some of them taking a supply of good things for any children who were ill, and unable to be present at our festive gathering. We sat down to recover our balance somewhat before we dispersed, ready to enjoy our Christmas all the more for the pleasure we had been able to give to our little ones.

I ought to say that we obtained part of the money for this treat by giving a Social Evening, for which the Education Committee kindly granted the use of the room. This year the money was contributed by the staff, with the exception of one or two small sums given by kind friends.

B. LIST OF BOOKS USED

List of Books containing Suggested Recitations.

New Recitations for Infants and Babies. 2*s.* By Annie Pickering. Published by G. Philip & Son.

Recitations, Rhymes and Dialogues. 1*s.* 6*d.* By Emily Warmington. Published by G. Philip & Son.

Winsome Words. 6*d.* By Ellen Terrey. Published by Charles & Dible.

A1 Dialogues and Recitations. 1*s.* 6*d.* By Alfonzo Gardiner. Published by E. J. Arnold.

Golden Grains on Froebel's Gifts. 1*s.* 6*d.* By Veronica Vassey. Published by Charles & Dible.

Recitation Books for Infant Schools and Classes. 1*s.* 6*d.* Published by W. & R. Chambers.

Little English Poems. 1*s.* 6*d.* By C. L. Thomson. Published by Horace Marshall.

Illustrated Recitations. Parts I and II. 1*d.* each. Stead's *Books for the Bairns,* Nos. 84 and 104.

List of Books containing Songs.

Babyland Melodies. 1*s.* By Rex Valentine. Published by Charles & Dible.
Golden Boat Songs. 1*s.* *Sea Shell Songs.* 1*s.* By Mrs. Ormiston Chant. Published by Curwen & Son.
Kindergarten Gift Plays. 2*s.* 6*d.* By M. E. Nuth. Published by Curwen & Son.
Songs for Little Children. Books I and II. 3*s.* each. By Eleanor Smith. Published by Curwen & Son.
Finger Plays. By Emilie Poulsson. Published by Boosey & Co.
Child's Song and Game Book. 3*s.* By Keatley Moore. Published by Sonnenschein.
Child's Garden of Verse. 1*s.* By R. L. Stevenson. Published by Enoch & Son.

List of Books containing Suggested Stories.

In the Child's World. 7*s.* 6*d.* By Emilie Poulsson. Published by G. Philip & Son.
The Story Hour. 2*s.* 6*d.* By K. D. Wiggin and N. Smith. Published by Gay & Bird.
Nature Myths. 2*s.* By Flora Cooke. Published by Curwen & Son.
Parables from Nature. 2*s.* By Mrs. Gatty. Published by George Bell.
In Nature's Storyland. 2*s.* 6*d.* By Edith Hirons. Published by G. Philip & Son.
Adventures of Ulysses. 1*s.* 6*d.* By Charles Lamb. Published by Ed. Arnold.
Stories from Chaucer. By C. L. Thomson. Published by Horace Marshall.
Stories from Spenser's "Fairie Queen." 1*d.* Stead's *Books for the Bairns.*
Stories from Spenser's "Fairie Queen." 2*s.* 6*d.* By C. L. Thomson. Published by Horace Marshall.
Andersen's Fairy Tales. 2*s.* 6*d.* Published by F. Warne.
Grimms' Fairy Tales. 2*s.* 6*d.* Published by F. Warne.
The Jungle Books. 4*s.* 6*d.* By R. Kipling. Published by Macmillan.
Just So Stories. 4*s.* 6*d.* By R. Kipling. Published by Macmillan.
Legends of Greece and Rome. 2*s.* By Grace Kupfer. Published by George Harrap.
Stories from the Latin Poets. 1*s.* By Margaret Pease. Published by Horace Marshall.
The Celtic Wonder World. 1*s.* By C. L. Thomson. Published by Horace Marshall.
Tales from the Greek. 1*s.* By H. and J. Stratton. Published by Horace Marshall.
Children of Odin. 1*s.* By E. E. Speight. Published by Horace Marshall.
Stories of Ancient Greece. 1*s.* 6*d.* By Nathaniel Hawthorne. Published by G. Philip & Son.
The Heroes. 1*s.* By C. Kingsley. Published by Macmillan.
Chirp and Chatter. 1*s.* 6*d.* By Alice Banks. Published by Blackie.
Earth's Many Voices. 1*s.* 6*d.* Published by S.P.C.K.
Alice in Wonderland. 6*d.* By Lewis Carroll. Published by Macmillan.
Through the Looking Glass. 6*d.* By Lewis Carroll. Published by Macmillan.
Water Babies. 6*d.* By C. Kingsley. Published by Macmillan.

It is not to be imagined for one single instant that we are fortunate enough to have all these books in our school library. A great many of them are borrowed from any one who is willing to lend them for a few days, and some of them have been bought by the staff.

The song and game books are, one and all, exceedingly good and useful volumes. Almost any subject in connection with the seasons can be found in one or another arranged as song or game, and in most cases both words and music are simple and good.

Good recitations are, as a rule, difficult to find, but these books are certainly the best I have seen, especially the two first-mentioned, and *Little English Poems.* The subjects are well chosen, as being in themselves attractive to young children, and there is no false sentiment. They contain many Nature poems and poems about child life. They should be in the hands of every teacher of infants.